PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

PROCUREMENT OF

One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center

Government of the Republic of the Philippines
Metals Industry Research and Development Center

Fifth Edition
November 2019

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Section I. Invitation to Bid



Invitation to Bid for

Procurement of One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center

- 1. The METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER, through the MIRDC Grant-in-Aid Project "Research on Advanced Prototyping for Product Innovation and Development Using Additive Manufacturing Technologies (RAPPID-ADMATEC)" Machinery and Equipment Outlay intends to apply the sum of FIVE MILLION FIVE HUNDRED THOUSAND PESOS (Php5,500,000.00) being the Approved Budget for the Contract (ABC) to payments under the contract for Procurement of One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center. Bids received in excess of the ABC shall be automatically rejected at bid opening.
- 2. The METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER now invites bids for Procurement of One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center. Delivery of the Goods is required One Hundred Twenty (120) calendar days. Bidders should have completed, within five (5) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the "Government Procurement Reform Act".
 - Bidding is open to all interested bidders, whether local or foreign, subject to the conditions for eligibility provided in the IRR of RA 9184.
- 4. Interested bidders may obtain further information from *Ms. Mary Grace B. Opon/Kristine A. Gealan, BAC Secretariat, MIRDC* and inspect the Bidding Documents at the address given below during *office hours, from 9:00 A.M. to 4:00 P.M.*
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on Nov. 15, 2019 from the address below and upon payment of nonrefundable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Five Hundred Pesos (Php5,500.00) only.
 - It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the

Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

- 6. The METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER will hold a Pre-bid Conference on Nov. 22,2019, 9:00 A.M. at Mercury Conference Room, Third Floor, Gold Building, MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City, which shall be open to prospective bidders.
- 7. Bids must be duly received by the BAC Secretariat at the address below not later than *Dec. 11, 2019, 9:00 A.M.*. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 18.

Bid opening shall be on *Dec. 11, 2019, 9:00 A.M.* at *Mercury Conference Room, 3rd Floor, Gold Building, MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City.* Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below. Late bids shall not be accepted.

- 8. The Bidders shall submit four (4) sets of their Eligibility/Technical Documents and Financial Documents which are contained in two separately sealed envelopes, properly marked. All four (4) sets will be wrapped together by a manila paper, properly marked and sealed.
- 9. The *METALS INDUSTRY RESEARCH AND DEVELOPMENT CENTER* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.
- 10. For further information, please refer to:

Ms. Mercedita G. Abutal
BAC Chairperson
Metals Industry Research and Development Center
MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City
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Approved for Posting:

Engr. Robert O. Dizon Executive Director

Section II. Instructions to Bidders

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A. General

1. Scope of Bid

- a) The Procuring Entity named in the <u>BDS</u> invites bids for the supply and delivery of the Goods as described in **Error! Reference source not found.**.
- b) The name, identification, and number of lots specific to this bidding are provided in the <u>BDS</u>. The contracting strategy and basis of evaluation of lots is described in <u>ITB</u> Clause 28.

2. Source of Funds

The Procuring Entity has a budget or has received funds from the Funding Source named in the <u>BDS</u>, and in the amount indicated in the <u>BDS</u>. It intends to apply part of the funds received for the Project, as defined in the <u>BDS</u>, to cover eligible payments under the contract.

3. Corrupt, Fraudulent, Collusive, and Coercive Practices

- a) Unless otherwise specified in the <u>BDS</u>, the Procuring Entity as well as the bidders and suppliers shall observe the highest standard of ethics during the procurement and execution of the contract. In pursuance of this policy, the Procuring Entity:
 - (a) defines, for purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in RA 3019.
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, noncompetitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
 - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the

Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.

- (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract:
- (v) "obstructive practice" is
 - deliberately destroying, falsifying, altering (aa) concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters to the administrative proceedings investigation or from pursuing such proceedings or investigation; or
 - (bb) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in any of the practices mentioned in this Clause for purposes of competing for the contract.
- b) Further, the Procuring Entity will seek to impose the maximum civil, administrative, and/or criminal penalties available under applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in **ITB** Clause a)(a).
- c) Furthermore, the Funding Source and the Procuring Entity reserve the right to inspect and audit records and accounts of a bidder or supplier in the bidding for and performance of a contract themselves or through independent auditors as reflected in the **GCC** Clause 3.

4. Conflict of Interest

a) All Bidders found to have conflicting interests shall be disqualified to participate in the procurement at hand, without prejudice to the imposition of appropriate administrative, civil, and criminal sanctions. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (a) through (c) below and a general conflict of

interest in any of the circumstances set out in paragraphs (d) through (g) below:

- (a) A Bidder has controlling shareholders in common with another Bidder;
- (b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder;
- (c) A Bidder has the same legal representative as that of another Bidder for purposes of this bid;
- (d) A Bidder has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or influence the decisions of the Procuring Entity regarding this bidding process;
- (e) A Bidder submits more than one bid in this bidding process. However, this does not limit the participation of subcontractors in more than one bid;
- (f) A Bidder who participated as a consultant in the preparation of the design or technical specifications of the Goods and related services that are the subject of the bid; or
- (g) A Bidder who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.
- b) In accordance with Section 47 of the IRR of RA 9184, all Bidding Documents shall be accompanied by a sworn affidavit of the Bidder that it is not related to the Head of the Procuring Entity (HoPE), members of the Bids and Awards Committee (BAC), members of the Technical Working Group (TWG), members of the BAC Secretariat, the head of the Project Management Office (PMO) or the end-user unit, and the project consultants, by consanguinity or affinity up to the third civil degree. On the part of the Bidder, this Clause shall apply to the following persons:
 - (a) If the Bidder is an individual or a sole proprietorship, to the Bidder himself;
 - (b) If the Bidder is a partnership, to all its officers and members;
 - (c) If the Bidder is a corporation, to all its officers, directors, and controlling stockholders;
 - (d) If the Bidder is a cooperative, to all its officers, directors, and controlling shareholders or members; and

(e) If the Bidder is a joint venture (JV), the provisions of items (a), (b), (c), or (d) of this Clause shall correspondingly apply to each of the members of the said JV, as may be appropriate.

Relationship of the nature described above or failure to comply with this Clause will result in the automatic disqualification of a Bidder.

5. Eligible Bidders

- a) Unless otherwise provided in the <u>BDS</u>, the following persons shall be eligible to participate in this bidding:
 - (a) Duly licensed Filipino citizens/sole proprietorships;
 - (b) Partnerships duly organized under the laws of the Philippines and of which at least sixty percent (60%) of the interest belongs to citizens of the Philippines;
 - (c) Corporations duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the outstanding capital stock belongs to citizens of the Philippines;
 - (d) Cooperatives duly organized under the laws of the Philippines; and
 - (e) Persons/entities forming themselves into a Joint Venture (JV), *i.e.*, a group of two (2) or more persons/entities that intend to be jointly and severally responsible or liable for a particular contract: Provided, however, that Filipino ownership or interest of the JV concerned shall be at least sixty percent (60%).
- b) Foreign bidders may be eligible to participate when any of the following circumstances exist, as specified in the **BDS**:
 - (a) When a Treaty or International or Executive Agreement as provided in Section 4 of RA 9184 and its IRR allow foreign bidders to participate;
 - (b) Citizens, corporations, or associations of a country, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - (c) When the Goods sought to be procured are not available from local suppliers; or
 - (d) When there is a need to prevent situations that defeat competition or restrain trade.
- C) Government owned or -controlled corporations (GOCCs) may be eligible to participate only if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not attached agencies of the Procuring Entity.

d) Unless otherwise provided in the <u>BDS</u>, the Bidder must have completed a Single Largest Completed Contract (SLCC) similar to the Project and the value of which, adjusted, if necessary, by the Bidder to current prices using the Philippine Statistics Authority (PSA) consumer price index, must be at least equivalent to a percentage of the ABC stated in the <u>BDS</u>.

For this purpose, contracts similar to the Project shall be those described in the **<u>BDS</u>**, and completed within the relevant period stated in the Invitation to Bid and **ITB** Clause 12.1(a)(ii).

e) The Bidder must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, calculated as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started, coinciding with the contract to be bid.

The values of the domestic bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements submitted to the BIR.

For purposes of computing the foreign bidders' NFCC, the value of the current assets and current liabilities shall be based on their audited financial statements prepared in accordance with international financial reporting standards.

If the prospective bidder opts to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the ABC to be bid. If issued by a foreign universal or commercial bank, it shall be confirmed or authenticated by a local universal or commercial bank.

6. Bidder's Responsibilities

a) The Bidder or its duly authorized representative shall submit a sworn statement in the form prescribed in Technical Specifications

b)

c)	Item	Specifications and Requirements	Statement of Compliance
			Bidders must state here either "Comply"
			or "Not Comply" against each of the
			individual parameters of each
			Specification stating the corresponding
			performance parameter of the equipment
			offered. Statements of "Comply" or "Not
			Comply" must be supported by evidence
			in a Bidders Bid and cross-referenced to
			that evidence. Evidence shall be in the
			form of manufacturer's un-amended sales

	literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.a)(a)(ii) and/or GCC Clause 2.a)(a)(ii).
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	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
Purpose: To support da	ay-to-day operation of delivery units and information EN's customers, partners and stakeholders.
Item Name:	Detailed Specifications:
1. COOLING SYSTEM	
1.1 Two (2) units Air Conditioner	2.0HP Single split inverter type wall mounted 220 V 1PH atleast 57 hZ, with wireless remote Cooling Capacity – 16,557 (2,983-17,500) Power Consumption – 1,487 (227-1,718) Energy Efficient / EER – 10.3 (12.5-9.9) Sound Level@ Low – at least 45/35.3/ 23.7 Voltage,Frequency, Phase- 230-59-1

	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance	
setup and power syste		
	y-to-day operation of delivery units and information	
	N's customers, partners and stakeholders.	
	Ozone Friendly Refrigerant: Type- R410-A Physical Data (Indoor Net Dimension) W X H X D- 793 X 287 X 225 Physical Data (Outdoor Net Dimension) W X H X D – 777 X 545 X 287 Pipe Sizes (Liquid / Gas) – \$\phi6.35 / \phi12.7 Maximum Pipe Length – at least 18.5 One year warranty	
2. DATA CENTER,		
POWER SYSTEM,		
MONITORING AND		
CONTROL		
SYSTEM	Control and Manifesing Control	
	Control and Monitoring System: Supports Up to 6 intelligent sensor	
	Virtual Sensors monitor power, Modbus, network	
	devices, and other SNMP based equipment.	
	Built-in graphing and data logging, internally or to a	
	remote PC. Platform independent; free firmware	
	upgrades and utilities. Enables Access Control of 2 Doors using single Door Control unit	
	Supports Internal Audio Speaker	
	Supports Internal Microphone	
	Support 6 Full Auto Sense RJ-45 ports	
	At least 3x RJ-45 Expansion Ports Capable of 10/100Mbps Ethernet Port	
	Embedded web server display sensor information and	
2.1 One (let)	live video from connected cameras	
2.1 One (lot)	Integrates with network management system via	
monitoring and	SNMPv1 and Encrypted SNMPv3	
control system with provision for	Stream sensor information directly to cellphone or PDA ability to connect external GPRS/ GSM modem, Bluetooth and Wi-Fi USB adapters.	
anti-static setup	Uses Linux operating system	
and power system	One year warranty	
for a data center	Power System:	
	Supply and installation of cable ladders (150mm wide for	
	cable raceway power cable, 300mm wide for cable	
	raceway power cable)	
	Supply and Installation of 3-phase electrical power distribution system, electrical cabinet, convenience	
	power outlets, LED lighting fixtures, switches, and all	
	electrical materials and accessories, including feeder	
	line wires and components, royal cords, THHN wires,	
	main and sub breakers and panel boards for the UPS,	
	AC, and other auxiliary systems inside the server room.	
	Raise floor:	
	Supply and installation of raised flooring	
	Supply and installation of 900mm x 2100mm x 12mm	

tem Description: One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. glass panel door, top and bottom analog frame Inclusive of painting works (as needed) and finishing, raised flooring, with all restoration works required for a 3m x 4m room Should be capable to be integrated to monitoring and control system through a software command control application and platform. Capable of higher level of integration to the following system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port temperature and Extension cable 5ft included
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2.2 One (1) set Door Access Control System Capable of higher level of integration to the following system : CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port Capable of higher level of integration to the following system : CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet non-sensing cable and 8 feet sensing rope Extension cable 5ft included
2.2 One (1) set Door Access Control System application and platform. Capable of higher level of integration to the following system : CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port application and platform. Capable of higher level of integration to the following system : CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet non- sensing cable and 8 feet sensing rope Extension cable 5ft included
2.2 One (1) set Door Access Control System Capable of higher level of integration to the following system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port Capable of higher level of integration to the following system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet nonsensing cable and 8 feet sensing rope Extension cable 5ft included
system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet non- sensing cable and 8 feet sensing rope Extension cable 5ft included
Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet non-sensing cable and 8 feet sensing rope Extension cable 5ft included
Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet nonsensing cable and 8 feet sensing rope Extension cable 5ft included
2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port One (1) year Warranty 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet nonsensing cable and 8 feet sensing rope Extension cable 5ft included
2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet non-sensing cable and 8 feet sensing rope Extension cable 5ft included
2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port 23cm power in / out cable with bare ends 10 feet with sensing module, standard 18 feet nonsensing cable and 8 feet sensing rope Extension cable 5ft included
Inline power Meter 2.4 One (1) pc. Rope water sensor 2.5 One (1) pc. Single port Single port 2.6 One (1) pc. Single port Extension cable 5ft included
Rope water sensor 2.5 One (1) pc. Single port sensing cable and 8 feet sensing rope Extension cable 5ft included
2.5 One (1) pc. Single port Extension cable 5ft included
Single port Extension cable 5ft included
Extension cable 5ft included
temperature and
Humidity sensor
2.6 One (1) pc.
Airlink USB-based Modem for text alert
GSM/GPRS
3. FIRE
SUPPRESSION
SYSTEM
In accordance with the guidelines contained in NFPA 72 (2002), approved by Factory Mutual (FM), ANSI 864, 9th
edition, UL Listed to ANSI 864.
Capable of suppressing surface burning fire in Class A,
B and C hazzards. Ozone depleting potential (ODP) is
zero Component Specification:
a Reta cylinder assembly to be filled with at least 65
3.1 One (1) lot Fire lbs and
suppression 36 lbs agent (1 unit)
b. Complete Kit, with accessories, 24VDC c. Discharge Tube, Valve outlet adapter
d. 360 degree Discharge Nozzle 8 port (2 Ea)
e. Single releasing control Panel
f. Back-up Battery. 12VDC (2 units)
g. Smoke detector Ionization Sys Sensor h. Smoke detector Photoelectric Sys Sensor
i. Standard base two wire (4 units)
j. Manual release station (1 unit)

•	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
, , , , , , , , , , , , , , , , , , ,	d Control System with provision for anti-static Compliance
setup and power syst	tem for a data center
Purpose: To support of	lay-to-day operation of delivery units and information
	CEN's customers, partners and stakeholders.
g	k. Abort toggle switch station
	I. at least 5.5" diameter fire alarm (1 unit)
	m. Horne strobe system sensor (1 unit)
	One (1) year warranty
4. SERVER	
	Processor: 5198 2.1 Ghz 32-Core Xeon Gold
	Processors
	Chipset: Intel C621
	Memory: at least 118gb DDR4 2666 ECC Registered;
	10DIMM slots, Expansion Slots: atleast 3 x PCI-E 3.0 x
	6 (FHHL), 2 x PCI-E 3.0 x 6 (LP), 1 x PCI-E 3.0 x14 for
	Add-on-Module (AOM), 1 x PCI-E 3.0 x 3 NVMe M.2
	slot
	Onboard LAN: 2 x 1GbE LAN ports via Intel C621
4.1 One (1) set 2U	Onboard Graphics: ASPEED AST2500 BMC
Rackmount Server	Storage Controller: Broadcom 3108 SAS / SATA add-on
Rackillount Server	controller 2GB 1866MHz DDR3 on-card cache
	Storage: 3 x 4TB SATA Enterprise 7200 RPM RAID 5
	Drive Bays: atleast 6 x Hot-swap 3.5" SAS/SATA drive
	bays
	Power Supply: 998.5 W Redundant PSU Titanium Level
	(96% Efficiency)
	Cooling System: 3 x Hot-swap 7cm redundant PWM
	cooling fans, Format Factor: 2U Rackmount
	Three (3) years Warranty / 8 x 5 Next Business Days service, parts and labor
4.2 One (1) lic.	
- ' ' '	Windows Sever Datacenter 2019 64Bit English 1pk DSP
Operating System	OEI DVD 24 Core
5. RACK SYSTEM	
AND PDUs 42U	Will 505 5 M4000 5 00M / 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	With 595.5 X1069.5 C/W perforated doors w/ lock and
	key, slit slide panels, EIA Mounting rails; leveling feet; color black curved front door.
	A complete rack includes all of the following:
	1. Rack Frame
	2. Top cover
	3. Front door
	4. Split side panels
5.1 One (1) set 42U	5. Cage nuts, washer and screw (48 sets)
• •	6. Vertical cable panels for cable and mounting of
Rack	PDU (2pcs)
	7. Foot levelers (4pcs)
	8. Rack Connector (2sets- 4pcs per rack)
	All connection and accessories and screws
	10. Rack basic PDU: at least 30A C20, 18way c13 + 2
	way C18 meter, Black
	11. Basic PDU, 8x14-14 Socket, 1U, Black
	Phil flex Royal Cord 3C #10 (55m)
	Twist Lock Outlet Set 4 sets

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
etc.), Monitoring and setup and power syst	I Control System with provision for anti-static Compliance
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
5.2 One (1) set of	
Console Table and	Standard office table and chair
Chair	
6. IT EQUIPMENT	
& VIDEO	
CONFERENCING	
SYSTEM FOR	
BOARD ROOM,	
TRAINING ROOM	
& CONFERENCE	
ROOM	
	Support Multi-cast. Capable of Dual Network. Support
	Cascade Mode Application. Capable of Recording with USB Memory
	Enabling High-Definition Web Conferences. Broadband
	Stereo Full Duplex Audio. High quality video Full-HD
	1080/60p Adjusts data traffic based on network congestion
	through the use of Rate Control function. With Remote
	Camera Control
	With a unique Echo Canceller and with Smooth 2-way conversation with broadband stereo. Easy-to-understand
	remote lectures and seminars are conducted at multiple
	sites
	Connect to a sub-camera to share zoom and still images Compatible with other brand device. With Low
	Bandwidth Communication Support
6.1 One (1) set	External Control Interface Communication Method: SIP, H.323
Video	Video Compression Method: H.260.5 (mainstream
Conferencing Main	only), H.263, H.263+, H.263++ (reception only), H.263
Unit	High Profile, H.263 Baseline Profile Audio Compression Method: G.711 µ-law, A-law (3.4)
J.III.	kHz@64 kbps) G.722 (7.0 kHz@64 kbps) G.722.1 (7.0
	kHz@32 kbps)
	G.722.1 Annex C (14.0 kHz@48 kbps/24 kbps) MPEG-4 AAC-LD Mono (7.0 kHz@32 kbps, 14.0
	kHz@64 kbps, 22.0 kHz@96 kbps)
	MPEG-4 AAC-LD Stereo (14.0 kHz@64 kbps, 22.0 kHz@96 kbps)
	No. of Channels: G.711/G.722/G.722.1/G.722.1 Annex
	C: 1
	MPEG-4 AAC-LD Mono: 1/ MPEG-4 AAC-LD Stereo: 2 Remote Camera Control: H.223, H.279
	(Zoom/Pan/Tilt/Preset)
	Dual Stream - Method: H.235 (H.321), BFCP (SIP) Multi-Monitor: atleast 2 displays
	No. of Applicable Resolution Frames - Main: Max.
	1080p 25 frames/second, Sub: Max. 1080p 25
	frames/second

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Encryption: SRTP (AES 126 bit), H.234 (AES 126 bit) **Other:** H.460 Communication Bandwidth: 253 kbps to 22 Mbps Video Compatible Resolutions*1: 176 x 144p. 352 x 240p, 352 x 288p, 512 x 288p, 640 x 480p, 704 x 480p. 704 x 576p, 768 x 432p, 800 x 600p, 1024 x 768p, 1280 1280 1280 x 800p, 1920 x 1080p No. of Frames: Max. 57 frames/second (for H.264 (q080t) Screen Display: Full-screen, Picture in Picture, Picture with Picture, Side by Side Audio: Echo canceller, Auto gain control, Stationary noise reduction, Lip synch, Equalizer, Mic mute I/O Terminals Video Input: Camera*2: HDMI main x 1, HDMI sub x 1 Input resolution: 1280 x 720p, 1920 x 1080i, 1920 x 1080p PC: RGB x 1(Mini D-sub 13pin). HDMI x 1*2 Input resolution: VGA, SVGA, XGA, HD, WXGA, SXGA, FWXGA, WXGA+, WXGA++, UXGA, WSXGA+, Full-HD Video Output: HDMI x 2, HDMI x 1 (For own site/recording video), RCA x 1 (Component) Supported output resolutions: 1918 x 1080i, 1918 x 1080p Audio Input: Digital Boundary Microphone x 1 (KX-VCA001) Max. 4, Analogue Boundary Microphone x 1 (KX-VCA002) Max. 1, HDMI, Stereo mini-plug*3*4 x 1 (ø3.5 mm), RCA*5 (Stereo) x 1 Audio Output: HDMI*6, Stereo mini-plug*3*7 x 1 (ø3.5 mm), RCA*8 x 1 (Stereo) Network: RJ45 x 2 (1000BASE-T/100BASE-TX Full Duplex) External Control: RS-232C x 1 (Also used for maintenance) Others: USB 2.0*9 x 1, Camera Control Terminal x 1 (Not used) No. of Simultaneous Connection Sites: (Expandable up to 24) Content Sharing: PC (RGB/HDMI), Sub-camera (HDMI USB Host Mode (USB Memory): Updating Software, Recording, Import: Contact List / Profile*10 / Configuration Data / Encryption Data Start-up Screen Delivery Tree List Export: Contact List / Profile*10 / Configuration Data / Encryption Data **Delivery Tree List** USB Device Mode: USB Video Class: Version 1.0 USB Audio Class: Version 1.0 Network Protocol: TCP/IPv4, TCP/IPv6*11, UDP/IPv4, DHCP, UDP/IPv6*11, DNS, HTTP, HTTPS, TELNET, NTP

Network Functions: Packet resending (ARQ), Forward

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center	u	· (4) I · (IT O · (· · · (O · · · · · O · · · · · O · · · ·
Setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Error Correction (FEC), Adaptive Rate Control (ARC), Reorder, Packet Shaping, Arbitrary Port Setting, NAT Compatibility, Encryption, IP Precedence/Diffsers Vupport External Control: Via Web Browser, Control by HTTP CGI, TELNET, RS-232C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode in maximum approx. 267 mm x approx. 38 mm x approx. 276 mm x approx. 59 mm (Excluding projecting parts). Weight: Approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stere of Monaural *11.5 **Microphone Unit: Unidirectional ECM microphone parts at least varies warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stere of Monaural *11.5 **Microphone Unit: Unidirectional ECM microphone Connection: 2 Dimensions: Approx. 18 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Cable Length: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080h, 1918 x 1080p Pan / Titt: Pan: ±35*, Titt: ±19° Zoom (opitical/digital): 2x / 3x Angle of Vew (opitical zoom): Horizontal angle	•	
Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Error Correction (FEC), Adaptive Rate Control (ARC), Reorder, Packet Shaping, Arbitrary Port Setting, NaT Compatibility, Encryption, IP Precedence/Diffserv Support External Control: Via Web Browser, Control by HTTP CGI, TELNET, RS-232C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 33 kg (approx. 73 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby. 0 S W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portugues, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range : Approx. 3.5 m (radius) Pickup Method: Stere of Monaural *11.5* 'Microphone Unit: Unidirectional ECM microphones Parts at least x 3' Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Oper	,	•
exchange among AMCEN's customers, partners and stakeholders. Error Correction (FEC), Adaptive Rate Control (ARC), Reorder, Packet Shaping, Arbitrary Port Setting, NAT Compatibility, Encryption, IP Precedence/Diffserv Support External Control: Via Web Browser, Control by HTTP CGI, TELINET, RS-232C Connection Modes: IP modes.		
Error Correction Adaptive Rate Control (ARC). Reorder, Packet Shaping. Arbitrary Port Setting, NAT Compatibility, Encryption. IP Precedence/Diffserv Support External Control: Val Web Browser, Control by HTTP CGI, TELNET, RS-232C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 33 kg (approx. 73 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby. 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Durtch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 'Microphone Unit: Unidirectional ECM microphone Dirt: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 7.5 m Cable Length: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weigh: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 10800, 1918 x 10800 Pan / Til: 29n: 995°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (vivice end) - 2.95° (Tele end); P1.2 (Wide end) - 1.25°, 17 (Tele end), Vertical angle of view, 80° (vivice end) - 2.95° (Tele end); P1.2 (Wide end) - 1.25°, 17 (Tele end), Vertical angle of view, 65.4° (Wide end) - 2.05° (Tele end); P1.2 (Wide end) - 1.25°, 17 (Tele end), Vertical angle of view, 65.4° (Wide end) - 2.05° (Tele end); P1.2 (Wide end) - 1.25°		
Adaptive Rate Control (ARC), Reorder, Packet Shaping, Arbitrary Port Setting, NAT Compatibility, Encryption, IP Precadence/DiffServ Support External Control: Via Web Browser, Control by HTTP CGI, TEINET, RS-232/C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby; 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone Unit: Unidirectional ECM microphone Darts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressue: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 116 mm (diameter) x 25 mm Cable Length: Approx. 275 g Operating Temperature: 0 *C to 40 *C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 275 g Operating Temperature: 0 *C to 40 *C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 *C to 40 *C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pickels: 1918 x 1080i, 1918 x 1080ip Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/dignal): 2x / 3x Angle of vew (optical 2 coom): Horizontal angle of view, 80° (Wide end) - 2.95° (Tele end), F1.2 (Wide end) - F2.1 (Tele end); F2.1 (Tele end); F1.1 (Wide end) - F2.1 (Tele end); F1.1 (Wide end) - F2.1 (Tele end); F2	exchange among AMC	
Arbitrary Port Setting, NAT Compatibility, Encryption, IP Precedence/DiffServ Support External Control: Via Web Browser, Control by HTTP CGI, TELNET, RS-232C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby; 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0°C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural*11.5 'Microphone Unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 275 m Cable Length: Approx. 275 m Power Input: Supplied from main unit via proprietary cable Weight: 1.3 kg Operating Humidity: 10 % to 90 % (non-condensing) Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pickles: 1918 kg 1080i, 1918 x 1080i Pan / Tilt: Pan: ±95°, Tilt: ±190° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 2.95° (Tele end), F1.2 (Wide end) - F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		\ //
IP Precedence/DiffServ Support		
CGI, TELNET, RS-232C Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1, 0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby; 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0°C to 40°C (32°F to 104°F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum d microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0°C to 40°C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0°C to 40°C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixeis: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (policial/digita): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 20.5° (Tele end), 1972 (Wide end) - 12.0 (Wide end)		
Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: National Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone parts at least x.3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Length: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 3.8 kg Operating Temperature: 0 °C to 40 °C Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 20.5° (Tele end), F1.2 (Wide end) - F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
NAT Traversal mode Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 'Microphone Unit: Unidirectional ECM microphone parts at least x 3' Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Temperature: 0 °C to 40 °C Operating Temperature: 10 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 20.5° (Tele end), Petic end) - F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 318 mm x approx. 267 mm x approx. 318 mm x approx. 33 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 microphone parts at least x 3" Number of Connections: Maximum A microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Length: Approx. 275 g Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 3.8 g Operating Temperature: 0 °C to 40 °C Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080ip Pan / Tilt: Pan: 495°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 29.5° (Tele end), P.1.2 (Wide end) - F.2.1 (Tele end); Presset: a least 10 positions Connection Cable: HDMI		
x approx. 267 mm x approx. 59 mm (Excluding projecting parts) Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone Unit: Unidirectional ECM microphone Unit of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty 6.4 One (1) set Extension Cable for Microphone unit Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tit: Pan: ±95°, Tilt: ±19° Zoom (optical/digita): 2x / 3x Angle of view (optical zoom): Horizontal angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -, 20.5° (Tele end), Vertical angle of view (65.4° (Wide end) -,		
Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 7.5 m Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty 6.4 One (1) set Extension Cable for Microphone unit 6.5 One (1) set Video Conference Camera 6.6 One (1) set Video Conference Camera 6.7 One (1) set Video Conference Camera 6.8 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view 65.4 (Wide end) - 2.95 (Tele end), Vertical angle of view		x approx. 267 mm x approx. 59 mm (Excluding
Power Input: AC 100-240 V, -1.0 A, 45/55 Hz Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range : Approx. 3.5 m (radius) Pickup Method : Stereo / Monaural *11.5 *Microphone Unit: Unidirectional ECM microphone parts at least x 3° Number of Connections : Maximum 4 microphones Maximum Input Sound Pressure : 105 dBspl Number of Terminals for Microphone Connection : 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (opical/digital): 22 x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) - 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) - 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) - 29.5° (Tele end), Presets: at least 10 positions Connection Cable : HDMI		
Power Consumption: Maximum: approx. 70 W, Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A		
Standby: 0.5 W DC Power Input: DC 24 V, 2.5 A Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural '11.5 "Microphone Unit: Unidirectional ECM microphone unit Unidirectional ECM microphone Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tit: Pan: ±95, Tit: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 29.5° (Tele end), F1.2 (Wide end) - F2.1 (Tele end); Presets: at least 10 positions Connection Cable): HDMI		
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Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F) Operating Humidity: 10 % to 90 % (non-condensing) Language: English, German, French, Italian, Spanish, Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5		0.5 W
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Language: English, German, French, Italian, Spanish, Dutch, Portugueses, Japaneses, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range: Approx. 3.5 m (radius) Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) - 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
With 1 free HDVC Mobile License for 1 year One (1) year warranty Maximum Pickup Range : Approx. 3.5 m (radius) Pickup Method : Stereo / Monaural *11.5 "Microphone Unit : Unidirectional ECM microphone parts at least x 3" Number of Connections : Maximum 4 microphones Maximum Input Sound Pressure : 105 dBspl Number of Terminals for Microphone Connection : 2 Dimensions : Approx. 118 mm (diameter) x 25 mm Cable Length : Approx. 7.5 m Power Input : Supplied from main unit via proprietary cable Weight : Approx. 275 g Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m Weight : 1.3 kg Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) -, 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		Language: English, German, French, Italian, Spanish,
One (1) year warranty Maximum Pickup Range : Approx. 3.5 m (radius) Pickup Method : Stereo / Monaural *11.5 "Microphone Unit : Unidirectional ECM microphone parts at least x 3" Number of Connections : Maximum 4 microphones Maximum Input Sound Pressure : 105 dBspl Number of Terminals for Microphone Connection : 2 Dimensions : Approx. 118 mm (diameter) x 25 mm Cable Length : Approx. 7.5 m Power Input : Supplied from main unit via proprietary cable Weight : Approx. 275 g Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m Weight : 1.3 kg Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 65.4° (Wide end) - 7.0.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		
Maximum Pickup Range : Approx. 3.5 m (radius) Pickup Method : Stereo / Monaural **11.5 "Microphone Unit : Unidirectional ECM microphone parts at least x 3" Number of Connections : Maximum 4 microphones Maximum Input Sound Pressure : 105 dBspl Number of Terminals for Microphone Connection : 2 Dimensions : Approx. 118 mm (diameter) x 25 mm Cable Length : Approx. 7.5 m Power Input : Supplied from main unit via proprietary cable Weight : Approx. 275 g Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m Weight : 1.3 kg Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view, 80° (Wide end) - 29.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		
Pickup Method: Stereo / Monaural *11.5 "Microphone Unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) - 29.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
"Microphone Unit: Unidirectional ECM microphone parts at least x 3" Number of Connections: Maximum 4 microphones Maximum Input Sound Pressure: 105 dBspl Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) - 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
Number of Connections: Maximum 4 microphones		
Video Conferencing Microphone		
Video Conferencing Microphone Number of Terminals for Microphone Connection: 2 Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	63 Three (3) set	
Conferencing Microphone Dimensions: Approx. 118 mm (diameter) x 25 mm Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) - 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	• •	
Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) set Extension Cable for Microphone unit Cable Length: Approx. 7.5 m Power Input: Supplied from main unit via proprietary cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) – 20.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
cable Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Temperature: 0 °C to 40 °C Operating Temperature: 10 °C to 40 °C Operating Temperature: 10 °C to 40 °C Operating Temperature: 20 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) - 29.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	_	Cable Length : Approx. 7.5 m
Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	Microphone	
Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m Weight : 1.3 kg Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		
Operating Humidity: 10 % to 90 % (non-condensing) One (1) year warranty Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		
Dimensions (diameter x length): 7 mm (cable outer diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		Operating Humidity: 10 % to 90 % (non-condensing)
diameter) x 20 m Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		One (1) year warranty
Weight: 1.3 kg Operating Temperature: 0 °C to 40 °C Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	` ,	
Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI	Extension Cable	,
Operating Humidity: 10 % to 90 % (non-condensing) Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt: Pan: ±95°, Tilt: ±19° Zoom (optical/digital): 2x / 3x Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI	for Microphone	
Effective Pixels: 1918 x 1080i, 1918 x 1080p Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI	unit	
6.5 One (1) set Video Conference Camera Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		
Video Conference Camera Angle of view (optical zoom): Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets: at least 10 positions Connection Cable: HDMI		Pan / Tilt : Pan: ±95°, Tilt: ±19°
Video Conference Camera So (Wide end) - 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI	6.5 One (1) set	
Camera 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI	` '	
F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI		
Connection Cable : HDMI	Callierd	
Dimensions (width x depth x height): Approx. 130 mm x		Connection Cable : HDMI
		Dimensions (width x depth x height): Approx. 130 mm x

etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center					
Purpose: To support day-to-day operation of delivery units and information					
exchange among AMCEN's customers, partners and stakeholders.					
approx. 125 mm x approx. 134 mm					
Weight: Approx. 0.6 kg					
Operating Temperature : 0 °C to 40 °C					
Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty					
Technology: Laser LCD. Brightness: at least 5 000 - 5					
450 lumens. Power Supply AC 100-240 V, 45.5- 58 Hz					
Power Consumption: *1 435W (during standby) Approx.					
0.4 W (When [STANDBY MODE] is set to [ECO]) Approx. 20 W (When [STANDBY MODE] is set to					
[NORMAL]) Approx. 47 W(When [IN STANDBY MODE]					
in [AUDIO SETTING] is set to [ON], maximum audio is					
output, and USB memory is inserted in the terminal)					
Approx. 115 W(When [QUICK STARTUP] is set to [ON], [IN STANDBY MODE] in [AUDIO SETTING] is set to					
[ON], maximum audio is output, and the power is					
supplied from the terminal					
BTU Value: Max 1,533BTU					
LCD Panel Panel Size: 17.3 mm (0.76 inches) diagonal (16:10 aspect ratio)					
LCD Panel Display Method:Transparent LCD panel (x					
3, R/G/B)					
LCD Panel Drive Method: Active matrix method LCD Panel Pixels:2,299,000 (1918 x 1198) x 3, total of					
6,899,000 pixels					
Light Source: Laser Diode Laser class 1(Class3R for US					
models)					
6.6 One (1) set Illumination Life of Set: Varies depending on operation mode setting. 20,000 hours at half luminance *					
LCD Laser IEC62087: 2008 Broadcast contents, Dynamic contrast					
Projector [2], Temperature: 30°C (86F), Under conditions of 0.15					
mg/m 3 of particulate matte Projection Size: 1.02–10.16 m (40–400 inches)					
diagonally, 16:10 aspect ratio					
Light output * 5 000 - 5 450 lumens (Input signals: PC,					
Operating mode: Normal, Dynamic mode)					
Center-to-Corner Uniformity: 90% Contrast Ratio: *1 2,999,000:1(all white/all					
black)(Dynamic Contrast 1 or 2) (Input signals: PC,					
Operating mode: Normal, Dynamic mode)					
Resolution: WUXGA 1918 x 1198 pixels Scanning Frequency RGB: fH: 15- 91kHz, fV: 24 -					
100Hz, dot clock: 162 MHz or less					
Scanning frequency YPBPR(YCBCR): 480i (525i): fH					
15.73 kHz; fV 59.94 Hz, 576i (625i): fH 15.63 kHz; fV 50					
Hz, 480p (525p): fH 31.47 kHz; fV 59.94Hz, 576p (625p): fH 31.25 kHz; fV 50 Hz, 720 (750)/60p: fH 45.00					
kHz; fV 60 Hz, 720 (750)/50p: fH 37.50 kHz; fV 50 H z,					
1080 (1125)/60i: fH 33.75 kHz; fV 60 Hz, 1080					
(1125)/50i: fH 28.13 kHz; fV 50 Hz, 1080 (1125)/25p: fH 28.13 kHz; fV 25 Hz, 1080 (1125)/24p: fH 27.00 kHz; fV					
28.13 kHz; TV 25 Hz, 1080 (1125)/24p: TH 27.00 kHz; TV 24 Hz, 1080 (1125)/24sF: fH 27.00 kHz; fV 48 Hz, 1080					
(1125)/30p: fH 33.75 kHz; fV 30 Hz, 1080 (1125)/60p: fH					
67.50 kHz; fV 60 Hz, 1080 (1125)/50p: fH 56.25 kHz; fV					

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. 50 Hz Scanning Frequency | Video: fH: 14.70 kHz / 15.20 kHz Hz 45.5 INTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAMI Scanning Frequency | HDMI/DIGITAL LINK: · Moving image signal resolution: 480i (525i)*2, 576i (625i)*2, 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sF, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p Still image signal resolution: 640 x 400 to 1920 x 1200 (noninterlace) · Dot clock frequency: 25 MHz to 162 MHz Optical Axis Shift: Vertical ±67%, Horizontal ±35% lens/ET-ELS20/ET-ELW20/ET-ELT20/ET-(Supplied ELT21) Vertical ±60%, Horizontal ±30% (ET-ELW22) NOTE: Optical axis shift function cannot be operated when used with the ET-ELW21. Installation: Ceiling/desk/AUTO, front/rear, 360 degree free installation Speaker: 3.5 cm round-type x 1 Maximum Usable Volume Output: 8.5 W (monaural) Terminals | HDMI 1 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals: Linear PCM (Sample frequency: 45 kHz/44.1 kHz/32 kHz) Terminals | HDMI 2 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals: Linear PCM (Sample frequency: 45 kHz/44.1 kHz/32 kHz) Terminals | RGB 1 In: BNC (female) x 4, RGB/Y PB/PR (CB/CR) Terminals | RGB 2 In: D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR) Terminals | Monitor Out:D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR) Terminals | Video In:Pin jack x 1 Terminals | Audio In 1: M3 stereo jack x 1(L-R) Terminals | Audio In 2: M3 stereo jack x 1(L-R) Terminals | Audio In 3: Pin jack x 2(L-R) Terminals | Variable Audio Out: M3 jack, 0 V[rms] to 2.0 V[rms] variable, output imedance 2.2 k ohms and less Terminals | Serial In: D-sub 9 pin, RS-232C compliant, for computer control use Terminals | REMOTE 1:D-Sub 9 p (female) x 1, for external control (parallel) Terminals | REMOTE 2:M3 jack x 1(L-R) for link control (for wired remote control) Terminals | LAN: RJ-45 x 1 for network connection, 10/100Base-TX, compliant with PJLink™(Class 2) Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK (video/network/serial control)

2), Deep Color, HDCP

connection, 100Base-TX, compliant with PJLink™(Class

Terminals | VIEWER / PAIRING: USB type-A x 1 Terminals | DC Out: USB type-A x 1(DC 5V, 2A(Max))

•	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	Control System with provision for anti-static Compliance
setup and power syste	
	y-to-day operation of delivery units and information
exchange among AMCE	N's customers, partners and stakeholders.
	Power Cord Length:3.0m(9ft 10in)
	Noise Level: *1 32dB (Operating mode: NORMAL/ECO), 26dB (Operating mode: QUIET)
	Operating mode. QUET) Operating environment Temperature: 0°C (32°F) to
	45°C (113°F) The projector cannot be used at an
	altitude of 2,700 m (8,858') or higher above sea level.
	The light output may decrease to protect the projector
	when the operating environment temperature exceeds 36 °C (96.8 °F).
	Operating Environment Humidity: 20% to 80% (no
	condensation)
	One (1) year warranty
6.7 One (1) pc.	Support at least 20+3*10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber slot ports, port 1-23 can
Unmanaged PoE	support IEEE 802.3af/at PoE standard, Built-in 235W
fiber switch	power supply. Support 1U/18 inch rack installation.
	Supports 802.11ac standard Simultaneous 2.4GHz 300
6.8 One (1) pc.	Mbps and 5GHz 867 Mbps connections for 1198 Mbps
Router	of total available bandwidth
	Laser LCD, 4,500 – 4,900 lumens, WUXGA
	Compact and lightweight body bringing high brightness
	dynamic image
	Long lasting laser light source provide consistent
	brightness
	1.3 x zoom and wide horizontal and vertical lens shift for flexible installation
	Long lasting laser light source and low-maintenance
	design provide high brightness and superb image quality
	Light output*1: 4,500 – 4,900 lumens
	Technology: Laser LCD
	LCD panel Panel size (mm): 14 mm diagonal (15:9
	aspect ratio) LCD panel Panel size (inch): 0.62 inch diagonal (15:9)
	aspect ratio)
6.9 Two (2) sets	LCD panel Display method: Transparent LCD panel (x
` '	3, R/G/B) LCD panel Drive method: Active matrix
Laser Projector	LCD panel Pixels: 2,304,000 (1918 x 1198) x 3, total of
	5,500,000 pixels
	LENS: 1.6 x Manual zoom (throw ratio 1.09-1.77:1), F =
	1.60-2.12, f = 15.30-24.64 mm
	Light source: Laser diode
	Screen size (diagonal) (mm): 0.76 - 7.62 m, 16:10 aspect ratio
	Screen size (diagonal) (inch): 25-298 in, 15:9 aspect
	ratio
	Center-to-corner uniformity*1: 85%
	Contrast*1: 2,999,000:1 (all white/all black) (Input
	signals:PC,LIGHT POWER:NORMAL,PICTURE MODE:DYNAMIC,DAYLIGHT WIEW:OFF,DYNAMIC
	CONTRAST:[1],AUTO POWER SAVE:OFF)
	Resolution: 1918 x 1198 pixels
	Optical axis shift Vertical (from center of screen): 0 % -

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. +44 % (Manual) Optical axis shift | Horizontal (from center of screen): -20% - +20% (Manual) Keystone correction range*2: Vertical: ±22°. Horizontal: +33° Installation: Horizontal/Vertical. free 360-degree installation Terminals | HDMI 1/2 IN: HDMI 18-pin x 2 (Compatible with HDCP, Deep Color, 4K/30p signal input) Terminals | COMPUTER 1 IN: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) Terminals | COMPUTER 2 IN / MONITOR OUT: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) (input/output switching) Terminals | VIDEO IN: Pin jack x 1 Terminals | AUDIO 1/2 IN: M3 stereo mini-jack x 2 Terminals | AUDIO 3 IN: Pin jack (L/R) x 1 Terminals | VARIABLE AUDIO OUT: M3 stereo minijack x 1 Terminals | SERIAL IN: D-sub 9-pin x 1 for computer control (RS-232C compliant) Terminals | LAN: RJ-45 x 1 for network control, 10Base-T. 100Base-TX, compatible with PJLink™ (Class 2) Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK connection. HDBase-T™ complian. 100Base-TX, compatible with PJLink™ (Class 2), HDCP, Deep Color, 4K/28p signal input Terminals | USB CONNECTOR: USB connector (Type A) x 1 for Memory Viewer function, power supply (DC5V, maximum 2A*3), optional wireless module AJ-WM50 Power supply: AC 100-240 V AC, 45/55 Hz Power consumption: TBD Built-in Speaker: 10 W (monaural) Operating noise*1: NORMAL: 35dB, QUIET: 27dB Cabinet materials: Molded plastic Included Filter cleaning cycle: 18,500 hours (0.08 mg/m3 of particulate matter), 9,900 hours (0.15 mg/m3 of particulate matter) Dimensions (W x H x D) (mm): 399 x 115 x 348 mm (Not including protruding parts)397 x 131 x 344 mm (With feet at shortest position) Dimensions (W x H x D) (inch): 15 23/32 x 4 17/32 x 13 11/16 inch (Not including protruding parts)15 23/32 x 5 1/4 x 13 11/16 inch (With feet at shortest position) Weight (kg)*4: 7.2 kg Weight (lbs.)*4:15.87 lbs. Operating environment (°C/M): Operating temperature: 0 °C- 45 °C, operating humidity: 20 %-80 % (no condensation) (°F/Feet): Operating environment Operating

% (no condensation)

temperature: 32 °F -113 °F, operating humidity: 20 %-80

Applicable software/application: Logo Transfer Software,

·	ne (1) Lot IT System (Server, Switch, LAN, WAN, St	
	d Control System with provision for anti-static Co	mpliance
setup and power sys		
Purpose: To support of	lay-to-day operation of delivery units and information	
exchange among AMC	CEN's customers, partners and stakeholders.	
	Multi Monitoring & Control Software, Presenter Light for	
	Windows®, Wireless Projector Apps for iOS/Android™	
	With Ceiling mount bracket	
	One (1) year warranty	
6 10 Three (2) nee	Installation Options: Floating Wall Mount / Ceiling Mount	
6.10 Three (3) pcs.	/ Suspended Mount (using the "L bracket"). Control	
102.5" Motorized	Options: IR / RF / RS485 + Dry Contact Control / 3-12	
Screen (15:9)	Voltage Trigger Control / Central Control / IP. Control - •	
, ,	Colour: Black / Whit• Aluminum Casing	
	Minimum of 61W , 97 Volt	
	Height- rack units (1U=43 mm) in U: 2	
	Depth (incl front) in mm : at least 293	
	Emergency power supply: 24 VDC	
	Output power RMS 100 volts in watts : 63 Dynamic output power 100 volts in watts: 63	
	Output power tappings: 97 – 67 volts – 7 ohms	
	MIC inputs balanced: 2	
	Line input unbalanced: 1	
	Priority switch : 1	
	Chime: yes	
	Priority output : 0	
	Frequency response (in Hz) : 59 – 17 k	
	Applicable in 100V : yes	
	Net weight product (kg): 5.39	
	Depth (build in) in mm : 273	
	Power supply: 115 - 230 VAC Power consumption (max) in watts: 167	
	Output power RMS 8 ohms in watts : 63	
	Minimum impedance load in ohms: 7	
	Zone outputs : 1	
6.11 Two (2) sets	Inputs with Phantom power : 2	
Amplifier System	Tone control yes	
	VOX mute: yes	
	Emergency input: 0	
	Priority levels : 2	
	Cooling system: convection Applicable low impedance: yes	
	Applicable low impedance . yes	
	Includes one (1) unit Multimedia player system:	
	HDMI Full HD Support; Full HD Video; Full HD Sound;	
	Full HD Microphone	
	User Contents	
	- Fast USB to HDD Transfer	
	- Edit (Rename, Delete, Modify)	
	- Auto Song Numbering assignment	
	Recording function	
	- MTV, Chorus, MIDI may be recorded	
	- Transfer Recordings to USB	
	- Edit (Rename, Delete, Modify)	
	- External USB HDDs Supported via USB connectivity	
	Multimedia Function	

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
	Control System with provision for anti-static Compliance	
setup and power system		
	ay-to-day operation of delivery units and information	
exchange among AMCI	EN's customers, partners and stakeholders.	
	- Full Playback Function	
	- avi, rmbv, mkv, mpg, wmv, etc.	
	- mp3, wma, aac, wav, etc.	
	- jpg, bmp, gif, etc.	
	Specifications:	
	Processor: Cortex-A9 1.2GHz Dual core	
	RAM: DDR3, 1GB Memory	
	Operating System: Android 4.2 Jelly Bean Storage: 1TB HDD	
	Microphone Input: Two (2) slots available	
	Microphone Volume: Available	
	Echo Volume: Available	
	USB Compatibility: Two (2) USB 2.0 Port	
	LED Backlit Buttons: Available	
	TV Input Channel: HDMI	
	: Video Out	
	:YPbPr Video Out	
	:Composite Video Out	
	Background Video Input: Two (2) Input Available	
	Audio Output :Analog Audio Out	
	:Optical Audio Out :Coaxial Audio Out	
	.Coaxiai Audio Out	
	Components	
	At least 7" woofer with woven fiberglass cone	
	1" PEI diaphragm tweeter with fluid cooling	
	Contemporary, high-design appearance	
	Built-in InvisiBall® mounting hardware, plus available U- bracket	
	Weather resistant enclosure and transducers	
	Wide 90° x 90° coverage	
	115W power handling (235W program) in direct 7Ω	
	setting, plus built-in 55W 65V/95V multi-tap transformer	
	High fidelity sound character with broad frequency response of 40 Hz – 18 kHz	
	System	
6.12 Four (4) sets	Frequency Range (-10 dB) - 40 Hz – 18 kHz	
Wall Speaker	Frequency Response (±3 dB) - 60 Hz – 15 kHz	
	Power Rating: 235W Continuous Program (2 hrs) 118W	
	(475W peak), Continuous Pink Noise (2 hrs) 90W (360W peak) Continuous Pink Noise (100 hrs)	
	Maximum Input Voltage – 27.5 V RMS (2 hrs), 55.0 V	
	peak	
	Maximum SPL3 – 112 dB ave. Continuous Pink Noise	
	(118 dB peak) Sensitivity – 91 dB, 1W/1m (ave. 100 Hz – 10 kHz)	
	Coverage Angle - 90° x 90°	
	Directivity Factor (Q) - 7.3 (averaged 1kHz – 16kHz)	
	Directivity Index (DI) – 8.3dB (averaged 1kHz – 16kHz)	
	Nominal Impedance – 7 ohms (THRU setting)	
	Crossover Type - 2nd order low-pass, 1st order high-	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. pass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting: 7Ω nominal
Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. pass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. pass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
exchange among AMCEN's customers, partners and stakeholders. pass, plus conjugate shaping Circuitry Transformer Taps - 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
pass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
55W, 25W, 10W Insertion Loss: <0.94 dB at any tap
I Setting Full Setting. (O nominal
Recommended Protective High-Pass – 6 45 Hz high-
pass (24 dB/oct) for 8Ω operation plus 15W and 7.5W
taps; 55 Hz for 30W tap; 65 Hz for 60W tap
Transducers Low Frequency – 198 mm (8 in), woven-fiberglass cone
with pure butyl rubber surround with Weather-Edge
frame protection, high-temp fiberglass voice coil former,
high-temp voice coil wire, optimized cone geometry,
linear suspension spider, and FEA optimized motor structure
High Frequency – 23 mm (1 in) PEI diaphragm, low-
viscosity ferromagnetic fluid, and lightweight Kapton™
voice coil former
Physical Enclosure Material - High Impact Polystyrene (HIPS)
with 10% glass fill, painted with highly-UV resistant paint
on white (-WH) version for maximum UV fade resistance
Grille – Highly zinc-plated, finished in durable TGIC
polyester powder coating. MTC-28WMG-1 (&-WH) available with Weather-Max™ multi-layer foam and tight-
weave mesh vapor barrier backing.
Installation – InvisiBall wall-mounting system included.
Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) U-bracket. Secondary
safety attachment loop point on back panel.
Agency Rating - ROHS-compliant; Transformer UL
Recognized per UL1876
Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when
mounted on InvisiBall wall-mount bracket; Net Weight –
6.8 kg (15.0 lbs)
One (1) year warranty
Designed metal housing with distinctive Aesthetic and ergonomic style
Interchangeable capsule module with premium
condenser
Patented capsule suspension design virtually Eliminates vibration and handling noises
Built-in high-efficiency antenna
Backlit LCD displays all operational parameter
Dual Handheld information
Microphone Provides precise and rapid frequency sync to the receiver
Technical Specifications
Frequency Range – UHF 478 – 931 MHz
Bandwidth – 21 MHz Oscillation Mode – PLL Synthesized
RF Output Power - 9 ~ 27mW (country dependent)
Deviation - < ± 40 kHz

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
, ·	Control System with provision for anti-static Compliance
Setup and power system Purpose: To support da	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
exonarige among / tiviol	Spurious Emissions < -53 dBc
	LCD Display - Group, Channel, Battery status & error
	codes
	Max. SPL – 135 dB SPL Battery Type - 2 x AA alkaline
	Operating Time – Min. 12 hours (Low Power)
	Current Consumption – Approx. 92 mA
	Dimensions - (Ø x L) 51 x 234 mm 2 x 9.2 " Net Weight - Approx. 251 g 8.9 oz
6.14 One (1) lot	The standard of the standard o
Speaker cable	
transparent #16	(XLR Male to XLR Female 1m), 3.5mm stere plug-2 X
AWG,	RCA Plug (1.5m)
Interconnector	
7. PABX	
EQUIPMENT	
	Support Multi-site networking. SIP Networking for Low
	cost. Flexible expansion by adding activation key.
	Support small to large communication system. Up to
	maximum 992 (with DXDP 1152) Extensions.
	Built-in support for Advanced IP extensions as well as standard SIP phones. Easy Migration to IP
7.1 One (1) set	SIP trunking Integrated SIP telephony via ITSPs* and
PBX Main Unit	other SIP trunk Providers.
	It is a high intuitive PC Based application suit that blend
	powerful point and click telephony.
	Wireless Mobility Solutions. Built-in and Optional Voice Mail Processing system.
	Reduced Total Cost of Ownership.
7.2 Two (2) sets	•
24-Port SLT	Physical Extension Cards
Extension Card	with Caller ID and Message Lamp Card
7.3 One (1) set 8-	
port Digital	Physical Extension Cards
Extension Card	
7.4 One (1) set	L-Type
Power Supply unit	, , , ,
7.5 One (1) set	
Back-up battery	included
Cable	
7.6 One (1) set 16-	16 channel digital signal processor card with one 4
ch VoIP DSP Card	channel IP trunk SHGW4 activation key and one 8 channel IP proprietary telephone IPPT8 activation key
on von Doi Galu	pre-installed
	<u> </u>

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•	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	d Control System with provision for anti-static Compliance
setup and power sys	
	lay-to-day operation of delivery units and information
exchange among AMC	CEN's customers, partners and stakeholders.
	Compliant with ITU-T G.729a and G.711 codec methods
	Mounts on IPCMPR card
	3-Line Backlight LCD Display; 24 Flexible CO Buttons
	Full Duplex Speakerphone; EHS Support Specifications:
	Main LCD Display (Lines/Characters) – 3/16
	LCD Backlight- Yes
	Flexible CO Keys – 24
7.7 Three (3) sets	Navigator Keys- Yes
` '	Soft Keys – 4
3-Line LCD Digital	Call Log Incoming/Outgoing Calls- Yes / Yes
Proprietary	Speakerphone - Yes (Full Duplex)
Telephone	Headset Port – Yes
	Electric Hook Switch (EHS)*1 – Yes
	Dimensions (mm) *2 (Width × Depth × Height)
	High Position267×170×180Low
	Position267×187×155Weight (g)*31070ColorBlack,
	White
	1-line Graphical LCD with backlighting; 8 freely
	programmable function keys; Speaker Phone, handset
	and headset with full duplex; Available in black and
	white colour
	Specification:
	LCD Type - Graphic
	LCD Dots (W x H) 160 x 18
	LCD Line 1
	LCD Character 16
	LCD Backlight Yes (On/Automatic/Off) Headset Yes (2.5
	mm audio jack) Full Duplex
7.8 One (1) set 1-	Electronics Hook Switch (EHS) No
Line Digital	Speakerphone Yes (Full Duplex) External Expansion 1 DXDP port
3	Bluetooth (for Headset) No
Proprietary	DXDP Yes
Telephone	XDP No
	Data Transmission Capability PBX to DPT: Cable fÓ0.5
	mm 500 m DPT to DPT: Cable fÓ0.5 mm 50 m
	Wall Mount Kit Yes (Option)
	Dimension (W x D x H mm) LOW: 205 x 160 x 170
	FF Keys 8
	Soft Keys No
	0-9, *, # Keys Yes
	Redial Key Yes
	Flash/Recall Key Yes
	Hold Key Yes
	SP-Phone Key Yes

em Description: One (1) Lot IT System (Server, Switch, LAN, WAN,	Statement of
, ,	ontrol System with provision for anti-static	Compliance
etup and power system	for a data center o-day operation of delivery units and information	
Exchange among AMCEN S	s customers, partners and stakeholders.	
	Auto Answer/Mute Key Yes	
	Auto Dial/Store Key Yes	
	Transfer Key Yes	
	Intercom Key Yes	
	Pause Key - Yes	
	CONF Key - Yes	
	FWD/DND Key No	
	Message Key Yes	
	Navigator Key No	
	4-Directions Key Yes	
	Cancel Key No	
	LED Message/Ringer Lamp Yes (Green/Red) LED FF	
	Keys Yes (Green/Red) LED Intercom Yes	
	(Green) LED SP-Phone Yes	
	(Red) LED Auto Answer/Mute Yes (Red) LED Auto	
	Dial/Store Yes	
	(Red) LED CONF No LED FWD/DND Yes (Red)	
	Message/Ringing Lamp Yes	
	OHCA Yes Bluetooth Headset Adapter No Auto Redial	
	No Off-Hook Monitor Yes Handset/Headset Mic Mute	
	Yes Speakerphone Mic Mute Yes	
	Phone Directory Yes	
	Feature Access No	
	Outgoing Call Log Yes	
	Incoming Call Log Yes	
	Audio Codec Yes (G.711)	
	USB Unit I/F No	
	System Programming No	
	Station Programming Yes*1	
	Electric Volume Headset 6 levels	
	Electric Volume Handset 6 levels	
	Electric Volume Speakerphone 8 levels Electric Volume	
	Ringer 4 + Off LCD Contrast 4 levels	
	Tones/Music on Hold No (Tone)	
	Tones/Music on Hold No (Tone) Footnote *1 To operate by PROGRAM Key or PAUSE	
	Key	
7.9 One (1) set 4- Ch IP Trunk	4-Channel H.323/SIP Gateway Activation Key	
	Integrated Talanhana System	
	Integrated Telephone System	
7.10 Twelve (12)	Choice of Five Colors: black, white, red, dark	
sets Basic Single	blue and grey; Wall Mountable; Last Number	
Line Telephone	Redial; Timed Flash	
- I	•	1

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance em for a data center
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
	Selector
	Switchable Tone/Pulse Settings
	Specifications:
	Dial Mode: Tone (DTMF)/pulse
	` ' '
	Redial: One-touch (32 digits)
	Flash: 600 ms
	Power Source: Telephone line
	Dimensions (H x W x D): 96 mm x 150 mm x
	200 mm
	Weight: 475 g
7.11 One (1) set AVR 1000W	included
7.12 Three (3) sets	
12V Battery	included
7.13 Five (5) sets	
Krone Terminal	included
7.14 Three (3) sets	
Amphenol Cable	included
with Head	
8. Supply and	
installation of IT	
equipment for the	
data center and	
other ICT	
equipment.	
Including	
_	
(Refrigerant piping	
type M hard drawn	included
copper pipe) and	
ACCU to FCU	
electrical power	
supply (THHN	
Philflex) with PVC	
flexible conduit. 1"	
diameter PVC	
condensate drain	
pipe including	

	e (1) Lot IT System (Server, Switch, LAN, WAN,	
setup and power syst	l Control System with provision for anti-static	Compliance
	ay-to-day operation of delivery units and information	
	EN's customers, partners and stakeholders.	
insulating using	71	
3/8" thick rubber		
insulation wrapped		
with polyethylene		
tape. Installation of		
FM200. installation		
of fire suppression		
control panel,		
programming and		
configuration.		
Installation of		
monitoring and		
access control		
system,		
configuration,		
testing and		
commissioning.		
PABX installation,		
tracing,		
termination,		
programming and		
testing. Tracing,		
termination and		
programming for		
HD visual		
communication		
system, projectors		
and audio system.		
Testing and		
commissioning of		
all equipment,		
miscellaneous and		
consumables and		
training of all the		
system and		
integration.		
9. OTHER		
REQUIREMENTS		

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center		
Purpose: To support d	ay-to-day operation of delivery units and information	
exchange among AiviC	EN's customers, partners and stakeholders.	
	9.1 To ensure the quality of service, the	
	contractor shall submit the following documents:	
	Supplier must have at least five (5) years of experience	
	in supply, delivery, installation, testing and	
	commissioning of network equipment and structured	
	cabling system / Data Center Solution.	
	Supplier must have completed at least one (1) similar	
	projects in supply, delivery, installation, testing and	
	commissioning of network equipment and Data Center	
	Solution.	
	The supplier shall submit implementation time-line that	
	reflects all the milestones in Gantt chart.	
	Supervised by a Certified License Electronics and	
	Communication Engineer.	
	Supplier must have at least Three (3) Certified Data	
	Center Professionals (CDCP) duly employed by the	
	company for at least 5 years and above.	
	Managed by a registered Project Manager (PM) and shall	
	submit a certificate issued by the Project Management	
	Institute (PMI).	
	Contractors must have Philippine Contractors	
	Accreditation Board (PCAB) licenses required by Republic	
	Act 4566 to perform	
	telecommunications/communications installations.	
	The contractor shall be responsible for all required permits.	
9.2 Maintenance / Support	One (1) year maintenance with quarterly preventive maintenance visit	
9.3 Warranty	One (1) year parts and services One (1) year Workmanship	
9.4 Training	Operations and Maintenance Training prior to the acceptance of the project. Including lectures and actual demonstration for at least 8 hours for minimum of ten (10) participants.	
9.5 Delivery / Project Duration	Project must be completed within 120 days upon receipt of Notice to Proceed	
9.6 Operations & Maintenance Manual (English)	Included	

- d) Section VIII. Bidding Forms as required in **ITB** Clause 12.a)(b)(iii).
- e) The Bidder is responsible for the following:
 - (a) Having taken steps to carefully examine all of the Bidding Documents;
 - (b) Having acknowledged all conditions, local or otherwise, affecting the implementation of the contract;
 - (c) Having made an estimate of the facilities available and needed for the contract to be bid, if any;
 - (d) Having complied with its responsibility to inquire or secure Supplemental/Bid Bulletin(s) as provided under **ITB** Clause 10.d).

- (e) Ensuring that it is not "blacklisted" or barred from bidding by the GOP or any of its agencies, offices, corporations, or LGUs, including foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the GPPB;
- (f) Ensuring that each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- (g) Authorizing the HoPE or its duly authorized representative/s to verify all the documents submitted;
- (h) Ensuring that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute and perform any and all acts necessary and/or to represent the Bidder in the bidding, with the duly notarized Secretary's Certificate attesting to such fact, if the Bidder is a corporation, partnership, cooperative, or joint venture;
- (i) Complying with the disclosure provision under Section 47 of RA 9184 and its IRR in relation to other provisions of RA 3019;
- (j) Complying with existing labor laws and standards, in the case of procurement of services; Moreover, bidder undertakes to:
 - (i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable.

In case there is a finding by the Procuring Entity or the DOLE of underpayment or non-payment of workers' wage and wage-related benefits, bidder agrees that the performance security or portion of the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of Republic Act No. 9184 without prejudice to the institution of appropriate actions under the Labor Code, as amended, and other social legislations.

(ii) Comply with occupational safety and health standards and to correct deficiencies, if any.

In case of imminent danger, injury or death of the worker, bidder undertakes to suspend contract implementation pending clearance to proceed from the DOLE Regional Office and to comply with Work Stoppage Order; and

- (iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work and other benefits under prevailing national laws, rules and regulations; or collective bargaining agreement; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment's premises; and
- (k) Ensuring that it did not give or pay, directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

Failure to observe any of the above responsibilities shall be at the risk of the Bidder concerned.

- f) The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents.
- g) It shall be the sole responsibility of the Bidder to determine and to satisfy itself by such means as it considers necessary or desirable as to all matters pertaining to the contract to be bid, including: (a) the location and the nature of this Project; (b) climatic conditions; (c) transportation facilities; and (d) other factors that may affect the cost, duration, and execution or implementation of this Project.
- h) The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible bidder out of the data furnished by the procuring entity. However, the Procuring Entity shall ensure that all information in the Bidding Documents, including bid/supplemental bid bulletin/s issued, are correct and consistent.
- i) Before submitting their bids, the Bidder is deemed to have become familiar with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect this Project in any way.
- j) The Bidder shall bear all costs associated with the preparation and submission of his bid, and the Procuring Entity will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- k) The Bidder should note that the Procuring Entity will accept bids only from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Invitation to Bid.

7. Origin of Goods

Unless otherwise indicated in the <u>BDS</u>, there is no restriction on the origin of goods other than those prohibited by a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, subject to **ITB** Clause 27.a).

8. Subcontracts

- a) Unless otherwise specified in the <u>BDS</u>, the Bidder may subcontract portions of the Goods to an extent as may be approved by the Procuring Entity and stated in the <u>BDS</u>. However, subcontracting of any portion shall not relieve the Bidder from any liability or obligation that may arise from the contract for this Project.
- b) Subcontractors must submit the documentary requirements under **ITB** Clause 12 and comply with the eligibility criteria specified in the **BDS**. In the event that any subcontractor is found by the Procuring Entity to be ineligible, the subcontracting of such portion of the Goods shall be disallowed.
- c) The Bidder may identify the subcontractor to whom a portion of the Goods will be subcontracted at any stage of the bidding process or during contract implementation. If the Bidder opts to disclose the name of the subcontractor during bid submission, the Bidder shall include the required documents as part of the technical component of its bid.

B. Contents of Bidding Documents

9. Pre-Bid Conference

- a) (a) If so specified in the <u>BDS</u>, a pre-bid conference shall be held at the venue and on the date indicated therein, to clarify and address the Bidders' questions on the technical and financial components of this Project.
 - (b) The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission and receipt of bids, but not earlier than seven (7) calendar days from the posting of the invitation to bid/bidding documents in the PhilGEPS website. If the Procuring Entity determines that, by reason of the method, nature, or complexity of the contract to be bid, or when international participation will be more advantageous to the GOP, a longer period for the preparation of bids is necessary, the pre-bid conference shall be held at least thirty (30) calendar days before the deadline for the submission and receipt of bids, as specified in the **BDS**.
- b) Bidders are encouraged to attend the pre-bid conference to ensure that they fully understand the Procuring Entity's requirements. Non-attendance of the Bidder will in no way prejudice its bid; however, the Bidder is expected to know the changes and/or amendments to the Bidding Documents as recorded in the minutes of the pre-bid conference and the Supplemental/Bid Bulletin. The minutes of the pre-bid conference shall be recorded and prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective bidders not later than five (5) days upon written request.
- 9.3 Decisions of the BAC amending any provision of the bidding documents shall be issued in writing through a Supplemental/Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

10. Clarification and Amendment of Bidding Documents

- a) Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such request must be in writing and submitted to the Procuring Entity at the address indicated in the <u>BDS</u> at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.
- b) The BAC shall respond to the said request by issuing a Supplemental/Bid Bulletin, to be made available to all those who have properly secured the Bidding Documents, at least seven (7) calendar days before the deadline for the submission and receipt of Bids.
- C) Supplemental/Bid Bulletins may also be issued upon the Procuring Entity's initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for the submission and receipt of Bids. Any modification to the Bidding Documents shall be identified as an amendment.
- d) Any Supplemental/Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS and the website of the Procuring Entity concerned, if available, and at any conspicuous place in the premises of the Procuring Entity concerned. It shall be the responsibility of all Bidders who have properly secured the Bidding Documents to inquire and secure Supplemental/Bid Bulletins that may be issued by the BAC. However, Bidders who have submitted bids before the issuance of the Supplemental/Bid Bulletin must be informed and allowed to modify or withdraw their bids in accordance with ITB Clause 23.

C. Preparation of Bids

11. Language of Bids

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign bidder's country; and shall be authenticated by the appropriate Philippine foreign service establishment/post or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. The English translation shall govern, for purposes of interpretation of the bid.

12. Documents Comprising the Bid: Eligibility and Technical Components

- a) Unless otherwise indicated in the <u>BDS</u>, the first envelope shall contain the following eligibility and technical documents:
 - (a) Eligibility Documents –

Class "A" Documents:

- (i) PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the IRR, except for foreign bidders participating in the procurement by a Philippine Foreign Service Office or Post, which shall submit their eligibility documents under Section 23.1 of the IRR, provided, that the winning bidder shall register with the PhilGEPS in accordance with section 37.1.4 of the IRR.
- (ii) Statement of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; and

Statement of the Bidder's SLCC similar to the contract to be bid, in accordance with ITB Clause 5.4, within the relevant period as provided in the **BDS**.

The two statements required shall indicate for each contract the following:

- (ii.1) name of the contract;
- (ii.2) date of the contract;
- (ii.3) contract duration;
- (ii.4) owner's name and address;
 - (ii.5) kinds of Goods;
 - (ii.6) For Statement of Ongoing Contracts amount of contract and value of outstanding contracts;
 - (ii.7) For Statement of SLCC amount of completed contracts, adjusted by the Bidder to current prices using PSA's consumer price index, if necessary for the purpose of meeting the SLCC requirement;
 - (ii.8) date of delivery; and
 - (ii.9) end user's acceptance or official receipt(s) or sales invoice issued for the contract, if completed, which shall be attached to the statements.
 - (iii) NFCC computation in accordance with ITB Clause 5.5 or a committed Line of Credit from a universal or commercial bank.

Class "B" Document:

(iv) If applicable, the Joint Venture Agreement (JVA) in case the joint venture is already in existence, or duly notarized

statements from all the potential joint venture partners in accordance with Section 23.1(b) of the IRR.

(b) Technical Documents –

- (i) Bid security in accordance with **ITB** Clause 18. If the Bidder opts to submit the bid security in the form of:
 - (i.1) a bank draft/guarantee or an irrevocable letter of credit issued by a foreign bank, it shall be accompanied by a confirmation from a Universal or Commercial Bank; or
 - (i.2) a surety bond, it shall be accompanied by a certification by the Insurance Commission that the surety or insurance company is authorized to issue such instruments;
- (ii) Conformity with technical specifications, as enumerated and specified in Sections VI and VII of the Bidding Documents; and
- (iii) Sworn statement in accordance with Section 25.3 of the IRR of RA 9184 and using the form prescribed in Technical Specifications

(iv)

(v) Item	Specifications and Requirements	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's unamended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples,

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independent test data
etc., as appropriate. A
statement that is not
supported by evidence or
is subsequently found to
be contradicted by the
evidence presented will
render the Bid under
evaluation liable for
rejection. A statement
either in the Bidders
statement of compliance
or the supporting
evidence that is found to
be false either during Bid
evaluation, post-
qualification or the
execution of the Contract
may be regarded as
fraudulent and render the
Bidder or supplier liable
for prosecution subject to
the provisions of ITB
Clause 3.a)(a)(ii) and/or
GCC Clause 2.a)(a)(ii).

	e (1) Lot IT System (Server, Switch, LAN, WAN, S I Control System with provision for anti-static em for a data center	
	ay-to-day operation of delivery units and information EN's customers, partners and stakeholders.	
Item Name:	Detailed Specifications:	
1. COOLING SYSTEM		
1.1 Two (2) units Air Conditioner	2.0HP Single split inverter type wall mounted 220 V 1PH atleast 57 hZ, with wireless remote Cooling Capacity – 16,557 (2,983-17,500) Power Consumption – 1,487 (227-1,718)	

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	I Control System with provision for anti-static Compliance
setup and power syst	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
exoriarige arriority / tivio	Energy Efficient / EER – 10.3 (12.5-9.9)
	Sound Level@ Low – at least 45/35.3/ 23.7
	Voltage,Frequency, Phase- 230-59-1
	Ozone Friendly Refrigerant : Type- R410-A
	Physical Data (Indoor Net Dimension) W X H X D- 793 X 287 X 225
	Physical Data (Outdoor Net Dimension) W X H X D –
	777 X 545 X 287
	Pipe Sizes (Liquid / Gas) – ϕ 6.35 / ϕ 12.7
	Maximum Pipe Length – at least 18.5 One year warranty
2. DATA CENTER,	/
POWER SYSTEM,	
MONITORING AND	
CONTROL	
SYSTEM	
	Control and Monitoring System: Supports Up to 6 intelligent sensor
	Virtual Sensors monitor power, Modbus, network
	devices, and other SNMP based equipment.
	Built-in graphing and data logging, internally or to a
	remote PC. Platform independent; free firmware upgrades and utilities. Enables Access Control of 2
	Doors using single Door Control unit
	Supports Internal Audio Speaker
	Supports Internal Microphone
	Support 6 Full Auto Sense RJ-45 ports At least 3x RJ-45 Expansion Ports
	Capable of 10/100Mbps Ethernet Port
2.1 One (lot)	Embedded web server display sensor information and
monitoring and	live video from connected cameras
control system	Integrates with network management system via SNMPv1 and Encrypted SNMPv3
with provision for	Stream sensor information directly to cellphone or PDA
	ability to connect external GPRS/ GSM modem,
anti-static setup	Bluetooth and Wi-Fi USB adapters.
and power system	Uses Linux operating system One year warranty
for a data center	Power System:
	Supply and installation of cable ladders (150mm wide for
	cable raceway power cable, 300mm wide for cable
	raceway power cable)
	Supply and Installation of 3-phase electrical power
	distribution system, electrical cabinet, convenience
	power outlets, LED lighting fixtures, switches, and all
	electrical materials and accessories, including feeder
	line wires and components, royal cords, THHN wires,
	main and sub breakers and panel boards for the UPS, AC, and other auxiliary systems inside the server room.
	Raise floor:
	1.4.00

ltem Description: One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static Compliance Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Supply and installation of raised flooring Supply and installation of 900mm x 2100mm x 12mm glass panel door, top and bottom analog frame Inclusive of painting works (as needed) and finishing, raised flooring, with all restoration works required for a 3m x 4m room Should be capable to be integrated to monitoring and control system through a software command control application and platform. Capable of higher level of integration to the following system: CCTV Surveillance System, Car Parking, Intrusion System, Elevator / Lift Control, Point. Includes fingerprint controller, Exit reader, power supply in metal enclosure, Mifare Cards. One (1) year Warranty 2.3 Two (2) pcs. Inline power Meter 2.4 One (1) pc. Rope water sensor In feet with sensing module, standard 18 feet nonsensing cable and 8 feet sensing rope	
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2.4 One (1) pc. 10 feet with sensing module, standard 18 feet non-	
Lange Marel 2611201 Laguarid cane and a regractional table	
Single port Extension cable 5ft included	
temperature and	
Humidity sensor	
2.6 One (1) pc.	
Airlink USB-based Modem for text alert	
GSM/GPRS	
3. FIRE	
SUPPRESSION	
SYSTEM	
In accordance with the guidelines contained in NFPA 72	
(2002), approved by Factory Mutual (FM), ANSI 864, 9th	
edition, UL Listed to ANSI 864.	
Capable of suppressing surface burning fire in Class A, B and C hazzards. Ozone depleting potential (ODP) is	
zero	
Component Specification:	
a. Beta cylinder assembly to be filled with at least 65	
suppression lbs and	
system 36 lbs agent (1 unit)	
b. Complete Kit, with accessories, 24VDC c. Discharge Tube, Valve outlet adapter	
d. 360 degree Discharge Nozzle 8 port (2 Ea)	
e. Single releasing control Panel	
f. Back-up Battery. 12VDC (2 units)	
g. Smoke detector Ionization Sys Sensor	
h. Smoke detector Photoelectric Sys Sensor	

	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
etc.), Monitoring and	d Control System with provision for anti-static Compliance
setup and power syst	tem for a data center
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
exonarige among 7 wie	i. Standard base two wire (4 units)
	j. Manual release station (1 unit)
	k. Abort toggle switch station
	I. at least 5.5" diameter fire alarm (1 unit)
	m. Horne strobe system sensor (1 unit)
	One (1) year warranty
4 SEDVED	
4. SERVER	
	Processor: 5198 2.1 Ghz 32-Core Xeon Gold
	Processors
	Chipset: Intel C621
	Memory: at least 118gb DDR4 2666 ECC Registered;
	10DIMM slots, Expansion Slots: atleast 3 x PCI-E 3.0 x
	6 (FHHL), 2 x PCI-E 3.0 x 6 (LP), 1 x PCI-E 3.0 x14 for
	Add-on-Module (AOM), 1 x PCI-E 3.0 x 3 NVMe M.2
	slot
	Onboard LAN: 2 x 1GbE LAN ports via Intel C621
4.1 One (1) set 2U	Onboard Graphics: ASPEED AST2500 BMC
Rackmount Server	Storage Controller: Broadcom 3108 SAS / SATA add-on
	controller 2GB 1866MHz DDR3 on-card cache
	Storage: 3 x 4TB SATA Enterprise 7200 RPM RAID 5 Drive Bays: atleast 6 x Hot-swap 3.5" SAS/SATA drive
	bays
	Power Supply: 998.5 W Redundant PSU Titanium Level
	(96% Efficiency)
	Cooling System: 3 x Hot-swap 7cm redundant PWM
	cooling fans, Format Factor: 2U Rackmount
	Three (3) years Warranty / 8 x 5 Next Business Days
	service, parts and labor
4.2 One (1) lic.	Windows Sever Datacenter 2019 64Bit English 1pk DSP
Operating System	OEI DVD 24 Core
5. RACK SYSTEM	
AND PDUs 42U	
	With 595.5 X1069.5 C/W perforated doors w/ lock and
	key, slit slide panels, EIA Mounting rails; leveling feet;
	color black curved front door.
	A complete rack includes all of the following:
	1. Rack Frame
	2. Top cover
	3. Front door
5.1 One (1) set 42U	4. Split side panels
` '	5. Cage nuts, washer and screw (48 sets)
Rack	6. Vertical cable panels for cable and mounting of PDU (2pcs)
	7. Foot levelers (4pcs)
	8. Rack Connector (2sets- 4pcs per rack)
	9. All connection and accessories and screws
	10. Rack basic PDU : at least 30A C20, 18way c13 + 2
	way C18 meter, Black
	11. Basic PDU, 8x14-14 Socket, 1U, Black
	Phil flex Royal Cord 3C #10 (55m)

Itama Danninti	- (4) Let IT Contain (Comerce Original LAN MAN Original Contains
etc.), Monitoring and	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power syst Purpose: To support d	ay-to-day operation of delivery units and information
exchange among AMC	EN's customers, partners and stakeholders.
	Twist Lock Outlet Set 4 sets
5.2 One (1) set of	
Console Table and	Standard office table and chair
Chair	
6. IT EQUIPMENT	
& VIDEO	
CONFERENCING	
SYSTEM FOR	
BOARD ROOM,	
, i	
TRAINING ROOM	
& CONFERENCE	
ROOM	
	Support Multi-cast. Capable of Dual Network. Support
	Cascade Mode Application. Capable of Recording with USB Memory
	Enabling High-Definition Web Conferences. Broadband
	Stereo Full Duplex Audio. High quality video Full-HD
	1080/60p
	Adjusts data traffic based on network congestion through the use of Rate Control function. With Remote
	Camera Control
	With a unique Echo Canceller and with Smooth 2-way
	conversation with broadband stereo. Easy-to-understand remote lectures and seminars are conducted at multiple
	sites
	Connect to a sub-camera to share zoom and still images
	Compatible with other brand device. With Low
0.4 0 (4)	Bandwidth Communication Support External Control Interface
6.1 One (1) set	Communication Method: SIP, H.323
Video	Video Compression Method: H.260.5 (mainstream
Conferencing Main	only), H.263, H.263+, H.263++ (reception only), H.263 High Profile, H.263 Baseline Profile
Unit	Audio Compression Method: G.711 μ-law, A-law (3.4
	kHz@64 kbps) G.722 (7.0 kHz@64 kbps) G.722.1 (7.0
	kHz@32 kbps)
	G.722.1 Annex C (14.0 kHz@48 kbps/24 kbps) MPEG-4 AAC-LD Mono (7.0 kHz@32 kbps, 14.0
	kHz@64 kbps, 22.0 kHz@96 kbps)
	MPEG-4 AAC-LD Stereo (14.0 kHz@64 kbps, 22.0
	kHz@96 kbps)
	No. of Channels: G.711/G.722/G.722.1/G.722.1 Annex C:
	MPEG-4 AAC-LD Mono: 1/ MPEG-4 AAC-LD Stereo: 2
	Remote Camera Control: H.223, H.279
	(Zoom/Pan/Tilt/Preset)
	Dual Stream - Method: H.235 (H.321), BFCP (SIP) Multi-Monitor: atleast 2 displays
	No. of Applicable Resolution Frames - Main: Max.
	1080p 25 frames/second, Sub: Max. 1080p 25

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. frames/second Encryption: SRTP (AES 126 bit), H.234 (AES 126 bit) **Other:** H.460 Communication Bandwidth: 253 kbps to 22 Mbps Video Compatible Resolutions*1: 176 x 144p, 352 x 240p, 352 x 288p, 512 x 288p, 640 x 480p, 704 x 480p, 704 x 576p, 768 x 432p, 800 x 600p, 1024 x 768p, 1280 720p. 1280 768p. X 1280 x 800p, 1920 x 1080p No. of Frames: Max. 57 frames/second (for H.264 1080p) Screen Display: Full-screen, Picture in Picture, Picture with Picture, Side by Side Audio: Echo canceller, Auto gain control, Stationary noise reduction, Lip synch, Equalizer, Mic mute I/O Terminals Video Input: Camera*2: HDMI main x 1, HDMI sub x 1 Input resolution: 1280 x 720p, 1920 x 1080i, 1920 x 1080p PC: RGB x 1(Mini D-sub 13pin), HDMI x 1*2 Input resolution: VGA, SVGA, XGA, HD, WXGA, SXGA, FWXGA, WXGA+, WXGA++, UXGA, WSXGA+, Full-HD Video Output: HDMI x 2, HDMI x 1 (For own site/recording video), RCA x 1 (Component) Supported output resolutions: 1918 x 1080i, 1918 x 1080p Audio Input: Digital Boundary Microphone x 1 (KX-VCA001) Max. 4, Analogue Boundary Microphone x 1 (KX-VCA002) Max. 1, HDMI, Stereo mini-plug*3*4 x 1 (ø3.5 mm), RCA*5 (Stereo) x 1 Audio Output: HDMI*6, Stereo mini-plug*3*7 x 1 (ø3.5 mm), RCA*8 x 1 (Stereo) Network: RJ45 x 2 (1000BASE-T/100BASE-TX Full Duplex) External Control: RS-232C x 1 (Also used for maintenance) Others: USB 2.0*9 x 1, Camera Control Terminal x 1 (Not used) Simultaneous Connection of (Expandable up to 24) Content Sharing: PC (RGB/HDMI), Sub-camera (HDMI sub) **USB Host Mode (USB Memory):** Updating Software, Recording. Import: Contact List / Profile*10 / Configuration Data / Encryption Data Start-up Screen Delivery Tree List Export: Contact List / Profile*10 / Configuration Data / Encryption Data Delivery Tree List USB Device Mode: USB Video Class: Version 1.0 USB Audio Class: Version 1.0 Network Protocol: TCP/IPv4, TCP/IPv6*11, UDP/IPv4,

HTTP, HTTPS, TELNET, NTP

DHCP,

DNS,

UDP/IPv6*11,

Item Description: One	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
	Control System with provision for anti-static Compliance	
setup and power syste	em for a data center	
	y-to-day operation of delivery units and information	
exchange among AMCE	EN's customers, partners and stakeholders.	
	Network Functions: Packet resending (ARQ), Forward	
	Error Correction (FEC), Adaptive Rate Control (ARC), Reorder, Packet Shaping,	
	Arbitrary Port Setting, NAT Compatibility, Encryption,	
	IP Precedence/DiffServ Support	
	External Control: Via Web Browser, Control by HTTP	
	CGI, TELNET, RS-232C	
	Connection Modes: IP mode, NAT Traversal mode, IP / NAT Traversal mode	
	Dimensions (width x depth x height): Approx. 318 mm	
	x approx. 267 mm x approx. 59 mm (Excluding	
	projecting parts)	
	Weight: Approx. 3.3 kg (approx. 7.3 lb) Power Input: AC 100-240 V, -1.0 A, 45/55 Hz	
	Power Consumption: Maximum: approx. 70 W,	
	Standby:	
	0.5 W	
	DC Power Input: DC 24 V, 2.5 A	
	Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F)	
	Operating Humidity: 10 % to 90 % (non-condensing)	
	Language: English, German, French, Italian, Spanish,	
	Dutch, Portuguese, Japanese, Russian, Chinese, Arabic	
	With 1 free HDVC Mobile License for 1 year One (1) year warranty	
	Maximum Pickup Range : Approx. 3.5 m (radius)	
	Pickup Method : Stereo / Monaural *11.5	
	"Microphone Unit : Unidirectional ECM	
	microphone parts at least x 3"	
6.3 Three (3) set	Number of Connections : Maximum 4 microphones Maximum Input Sound Pressure : 105 dBspl	
Video	Number of Terminals for Microphone Connection : 2	
	Dimensions : Approx. 118 mm (diameter) x 25 mm	
Conferencing	Cable Length : Approx. 7.5 m	
Microphone	Power Input : Supplied from main unit via proprietary cable	
	Weight : Approx. 275 g	
	Operating Temperature : 0 °C to 40 °C	
	Operating Humidity: 10 % to 90 % (non-condensing)	
C 4 One (4) eet	One (1) year warranty	
6.4 One (1) set	Dimensions (diameter x length) : 7 mm (cable outer diameter) x 20 m	
Extension Cable	Weight : 1.3 kg	
for Microphone	Operating Temperature : 0 °C to 40 °C	
unit	Operating Humidity: 10 % to 90 % (non-condensing)	
	Effective Pixels: 1918 x 1080i, 1918 x 1080p	
6.5. One (1) cot	Pan / Tilt : Pan: ±95°, Tilt: ±19°	
6.5 One (1) set	Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view,	
Video Conference	80° (Wide end) – 29.5° (Tele end), Vertical angle of view	
Camera	65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -,	
	F2.1 (Tele end); Presets : at least 10 positions	
	Connection Cable : HDMI	

•	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power system	·
	-to-day operation of delivery units and information
	N's customers, partners and stakeholders.
	Dimensions (width x depth x height) : Approx. 130 mm x
	approx. 125 mm x approx. 134 mm
	Weight : Approx. 0.6 kg Operating Temperature : 0 °C to 40 °C
	Operating Humidity: 10 % to 90 % (non-condensing)
	One (1) year warranty
6.6 One (1) set LCD Laser Projector	Technology: Laser LCD. Brightness: at least 5 000 - 5 450 lumens. Power Supply AC 100-240 V, 45.5-58 Hz Power Consumption: *1 435W (during standby) Approx. 0.4 W (When [STANDBY MODE] is set to [ECO]) Approx. 20 W (When [STANDBY MODE] is set to [INORMAL]) Approx. 47 W (When [IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is output, and USB memory is inserted in the terminal) Approx. 115 W (When [QUICK STARTUP] is set to [ON], [IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is output, and the power is supplied from the terminal BTU Value: Max 1,533BTU LCD Panel Panel Size: 17.3 mm (0.76 inches) diagonal (16:10 aspect ratio) LCD Panel Display Method:Transparent LCD panel (x 3, R/G/B) LCD Panel Drive Method: Active matrix method LCD Panel Pixels:2,299,000 (1918 x 1198) x 3, total of 6,899,000 pixels Light Source: Laser Diode Laser class 1 (Class3R for US models) Illumination Life of Set: Varies depending on operation mode setting. 20,000 hours at half luminance * IEC62087: 2008 Broadcast contents, Dynamic contrast [2], Temperature: 30°C (86F), Under conditions of 0.15 mg/m 3 of particulate matte Projection Size: 1.02–10.16 m (40–400 inches) diagonally, 16:10 aspect ratio Light output * 5 000 - 5 450 lumens (Input signals: PC, Operating mode: Normal, Dynamic mode) Center-to-Corner Uniformity: 90% Contrast Ratio: *1 2,999,000:1(all white/all black)(Dynamic Contrast 1 or 2) (Input signals: PC, Operating mode: Normal, Dynamic mode) Resolution: WUXGA 1918 x 1198 pixels Scanning Frequency RGB: fH: 15- 91kHz, fV: 24 - 100Hz, dot clock: 162 MHz or less
	Scanning frequency YPBPR(YCBCR): 480i (525i): fH
	15.73 kHz; fV 59.94 Hz, 576i (625i): fH 15.63 kHz; fV 50 Hz, 480p (525p): fH 31.47 kHz; fV 59.94Hz, 576p
	(625p): fH 31.25 kHz; fV 50 Hz, 720 (750)/60p: fH 45.00
	kHz; fV 60 Hz, 720 (750)/50p: fH 37.50 kHz; fV 50 H z,
	1080 (1125)/60i: fH 33.75 kHz; fV 60 Hz, 1080
	(1125)/50i: fH 28.13 kHz; fV 50 Hz, 1080 (1125)/25p: fH 28.13 kHz; fV 25 Hz, 1080 (1125)/24p: fH 27.00 kHz; fV
	24 Hz, 1080 (1125)/24sF: fH 27.00 kHz; fV 48 Hz, 1080
	(1125)/30p: fH 33.75 kHz; fV 30 Hz, 1080 (1125)/60p: fH

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. 67.50 kHz; fV 60 Hz, 1080 (1125)/50p: fH 56.25 kHz; fV 50 Hz Scanning Frequency | Video: fH: 14.70 kHz / 15.20 kHz fV: 55.55 Hz 45.5 [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM] Scanning Frequency | HDMI/DIGITAL LINK: · Moving image signal resolution: 480i (525i)*2, 576i (625i)*2, 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sF, 1080 (1125)/30p. 1080 (1125)/60p. 1080 (1125)/50p Still image signal resolution: 640 x 400 to 1920 x 1200 (noninterlace) · Dot clock frequency: 25 MHz to 162 MHz Optical Axis Shift: Vertical ±67%, Horizontal ±35% lens/ET-ELS20/ET-ELW20/ET-ELT20/ET-(Supplied ELT21) Vertical ±60%, Horizontal ±30% (ET-ELW22) NOTE: Optical axis shift function cannot be operated when used with the ET-ELW21. Installation: Ceiling/desk/AUTO, front/rear, 360 degree free installation Speaker: 3.5 cm round-type x 1 Maximum Usable Volume Output: 8.5 W (monaural) Terminals | HDMI 1 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals: Linear PCM (Sample frequency: 45 kHz/44.1 kHz/32 kHz) Terminals | HDMI 2 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals : Linear PCM (Sample frequency: 45 kHz/44.1 kHz/32 kHz) Terminals | RGB 1 In: BNC (female) x 4, RGB/Y PB/PR (CB/CR) Terminals | RGB 2 In: D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR) Terminals | Monitor Out:D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR) Terminals | Video In:Pin jack x 1 Terminals | Audio In 1: M3 stereo jack x 1(L-R) Terminals | Audio In 2: M3 stereo jack x 1(L-R) Terminals | Audio In 3: Pin jack x 2(L-R) Terminals | Variable Audio Out: M3 jack, 0 V[rms] to 2.0 V[rms] variable, output imedance 2.2 k ohms and less Terminals | Serial In: D-sub 9 pin, RS-232C compliant, for computer control use Terminals | REMOTE 1:D-Sub 9 p (female) x 1, for external control (parallel) Terminals | REMOTE 2:M3 jack x 1(L-R) for link control (for wired remote control) Terminals | LAN: RJ-45 x 1 for network connection, 10/100Base-TX, compliant with PJLink™(Class 2) Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network

2), Deep Color, HDCP

and DIGITAL LINK (video/network/serial control) connection, 100Base-TX, compliant with PJLink™(Class

Terminals | VIEWER / PAIRING: USB type-A x 1

etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Teminals JoC out USB typeA x 1(DC SV, 2A(Max)) Power Cord Length:3 0nr(9tr 10n) Noise Level: "1 32dB (Operating mode: NORMAL/ECO), 26dB (Operating mode: CUIET) Operating environment Propector cannot be used at an attitude of 2,700 m (8,855) or higher above sea level. The light output may decrease to protect the projector when the operating environment temperature exceeds 36 °C (96.8 °F). Operating Environment Humidity: 20% to 80% (no condensation) One (1) year warranty Support at least 204.3"10/100/1000M RJ45 ports and 2*1000M uplink SFP fiber slot ports, port 1-23 can support ISEE 802.33d/at PoE standard, Built-in 235W power supply. Support 10/18 inch rack installation. Supports 802.11ac standard Simultaneous 2.4GHz 300 Mbps and 5GHz 867 Mbps connections for 1198 Mbps of total available bandwidth Laser LCD, 4,500 – 4,900 lumens, WUXGA Compact and lightweight body bringing high brightness dynamic image Long Isating laser light source provide consistent brightness and supertimage quality Light output; "1.450 – 4,900 lumens Technology: Laser LCD LCD panel Panel size (mm): 14 mm diagonal (15:9 aspect ratio) LCD panel Panel size (inch): 0.62 inch diagonal (15:9 aspect ratio) LCD panel Drive method: Active matrix LCD panel Drive method:	Item Description: On	o (1) Lot IT System (Server Switch LAN WAN Statement of
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Center-to-corner uniformity*1: 85% Contrast*1: 2,999,000:1 (all white/all black) (Input		, , , ,
signals:PC,LIGHT POWER:NORMAL,PICTURE		
		signals:PC,LIGHT POWER:NORMAL,PICTURE
MODE:DYNAMIC,DAYLIGHT WIEW:OFF,DYNAMIC CONTRAST:[1],AUTO POWER SAVE:OFF)		
Resolution: 1918 x 1198 pixels		

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Optical axis shift | Vertical (from center of screen): 0 % -+44 % (Manual) Optical axis shift | Horizontal (from center of screen): -20% - +20% (Manual) Keystone correction range*2: Vertical: ±22°, Horizontal: ±33° Installation: Horizontal/Vertical, free 360-degree installation Terminals | HDMI 1/2 IN: HDMI 18-pin x 2 (Compatible with HDCP, Deep Color, 4K/30p signal input) Terminals | COMPUTER 1 IN: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) Terminals | COMPUTER 2 IN / MONITOR OUT: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) (input/output switching) Terminals | VIDEO IN: Pin jack x 1 Terminals | AUDIO 1/2 IN: M3 stereo mini-jack x 2 Terminals | AUDIO 3 IN: Pin jack (L/R) x 1 Terminals | VARIABLE AUDIO OUT: M3 stereo minijack x 1 Terminals | SERIAL IN: D-sub 9-pin x 1 for computer control (RS-232C compliant) Terminals | LAN: RJ-45 x 1 for network control. 10Base-T, 100Base-TX, compatible with PJLink™ (Class 2) Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK connection, HDBase-T™ complian, 100Base-TX, compatible with PJLink™ (Class 2), HDCP, Deep Color, 4K/28p signal input Terminals | USB CONNECTOR: USB connector (Type A) x 1 for Memory Viewer function, power supply (DC5V, maximum 2A*3), optional wireless module AJ-WM50 Power supply: AC 100-240 V AC, 45/55 Hz Power consumption: TBD Built-in Speaker: 10 W (monaural) Operating noise*1: NORMAL: 35dB, QUIET: 27dB Cabinet materials: Molded plastic Filter: Included Filter cleaning cycle: 18,500 hours (0.08 mg/m3 of particulate matter), 9,900 hours (0.15 mg/m3 of particulate matter) Dimensions (W x H x D) (mm): 399 x 115 x 348 mm (Not including protruding parts)397 x 131 x 344 mm (With feet at shortest position) Dimensions (W x H x D) (inch): 15 23/32 x 4 17/32 x 13 11/16 inch (Not including protruding parts)15 23/32 x 5 1/4 x 13 11/16 inch (With feet at shortest position) Weight (kg)*4: 7.2 kg Weight (lbs.)*4:15.87 lbs. Operating environment (°C/M): Operating temperature: 0

environment

condensation)
Operating

% (no condensation)

°C- 45 °C, operating humidity: 20 %-80 % (no

temperature: 32 °F -113 °F, operating humidity: 20 %-80

(°F/Feet):

Operating

Item Description: O	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	d Control System with provision for anti-static Compliance
	day-to-day operation of delivery units and information
	CEN's customers, partners and stakeholders.
	Applicable software/application: Logo Transfer Software, Multi Monitoring & Control Software, Presenter Light for Windows®, Wireless Projector Apps for iOS/Android™ With Ceiling mount bracket One (1) year warranty
	Installation Options: Floating Wall Mount / Ceiling Mount
6.10 Three (3) pcs.	/ Suspended Mount (using the "L bracket"). Control
102.5" Motorized	Options: IR / RF / RS485 + Dry Contact Control / 3-12
Screen (15:9)	Voltage Trigger Control / Central Control / IP. Control - •
	Colour: Black / Whit• Aluminum Casing
6.11 Two (2) sets Amplifier System	Minimum of 61W, 97 Volt Height- rack units (1U=43 mm) in U: 2 Depth (incl front) in mm: at least 293 Emergency power supply: 24 VDC Output power RMS 100 volts in watts: 63 Dynamic output power 100 volts in watts: 63 Output power tappings: 97 – 67 volts – 7 ohms MIC inputs balanced: 2 Line input unbalanced: 1 Priority switch: 1 Chime: yes Priority output: 0 Frequency response (in Hz): 59 – 17 k Applicable in 100V: yes Net weight product (kg): 5.39 Depth (build in) in mm: 273 Power supply: 115 - 230 VAC Power consumption (max) in watts: 167 Output power RMS 8 ohms in watts: 63 Minimum impedance load in ohms: 7 Zone outputs: 1 Inputs with Phantom power: 2 Tone control yes VOX mute: yes Emergency input: 0 Priority levels: 2 Cooling system: convection Applicable low impedance: yes Includes one (1) unit Multimedia player system: HDMI Full HD Support; Full HD Video; Full HD Sound; Full HD Microphone User Contents - Fast USB to HDD Transfer - Edit (Rename, Delete, Modify) - Auto Song Numbering assignment Recording function - MTV, Chorus, MIDI may be recorded - Transfer Recordings to USB - Edit (Rename, Delete, Modify) - External USB HDDs Supported via USB connectivity

•	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	Control System with provision for anti-static Compliance
setup and power system	
	y-to-day operation of delivery units and information
exchange among AMCE	N's customers, partners and stakeholders.
	Multimedia Function
	- Full Playback Function
	- avi, rmbv, mkv, mpg, wmv, etc.
	- mp3, wma, aac, wav, etc.
	- jpg, bmp, gif, etc.
	Specifications:
	Processor: Cortex-A9 1.2GHz Dual core
	RAM: DDR3, 1GB Memory
	Operating System: Android 4.2 Jelly Bean Storage: 1TB HDD
	Microphone Input: Two (2) slots available
	Microphone Volume: Available
	Echo Volume: Available
	USB Compatibility: Two (2) USB 2.0 Port
	LED Backlit Buttons: Available
	TV Input Channel: HDMI
	: Video Out
	:YPbPr Video Out
	:Composite Video Out
	Background Video Input: Two (2) Input Available
	Audio Output :Analog Audio Out
	:Optical Audio Out
	:Coaxial Audio Out
	Components
	At least 7" woofer with woven fiberglass cone
	1" PEI diaphragm tweeter with fluid cooling Contemporary, high-design appearance
	Built-in InvisiBall® mounting hardware, plus available U-
	bracket
	Weather resistant enclosure and transducers
	Wide 90° x 90° coverage
	115W power handling (235W program) in direct 7Ω setting, plus built-in 55W 65V/95V multi-tap transformer
	High fidelity sound character with broad frequency
	response of 40 Hz – 18 kHz
6.12 Four (4) sets	System
Wall Speaker	Frequency Range (-10 dB) - 40 Hz – 18 kHz
	Frequency Response (±3 dB) - 60 Hz – 15 kHz Power Rating: 235W Continuous Program (2 hrs) 118W
	(475W peak), Continuous Pink Noise (2 hrs) 90W (360W
	peak) Continuous Pink Noise (100 hrs)
	Maximum Input Voltage - 27.5 V RMS (2 hrs), 55.0 V
	peak
	Maximum SPL3 – 112 dB ave. Continuous Pink Noise
	(118 dB peak) Sensitivity – 91 dB, 1W/1m (ave. 100 Hz – 10 kHz)
	Coverage Angle - 90° x 90°
	Directivity Factor (Q) - 7.3 (averaged 1kHz – 16kHz)
	Directivity Index (DI) – 8.3dB (averaged 1kHz – 16kHz)

Item Description: On	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
	Control System with provision for anti-static Compliance	
setup and power syst		
	ay-to-day operation of delivery units and information	
exchange among AMCI	EN's customers, partners and stakeholders.	
	Nominal Impedance – 7 ohms (THRU setting)	
	Crossover Type - 2nd order low-pass, 1st order high- pass, plus conjugate shaping	
	Circuitry	
	Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V:	
	55W, 25W, 10W Insertion Loss: <0.94 dB at any tap	
	setting Thru Setting: 7Ω nominal	
	Recommended Protective High-Pass – 6 45 Hz high-	
	pass (24 dB/oct) for 8Ω operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap	
	Transducers	
	Low Frequency – 198 mm (8 in), woven-fiberglass cone	
	with pure butyl rubber surround with Weather-Edge	
	frame protection, high-temp fiberglass voice coil former,	
	high-temp voice coil wire, optimized cone geometry,	
	linear suspension spider, and FEA optimized motor structure	
	High Frequency – 23 mm (1 in) PEI diaphragm, low-	
	viscosity ferromagnetic fluid, and lightweight Kapton™	
	voice coil former	
	Physical Factoring Metarist Like Invacat Balantunana (UIBC)	
	Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint	
	on white (-WH) version for maximum UV fade resistance	
	Grille - Highly zinc-plated, finished in durable TGIC	
	polyester powder coating. MTC-28WMG-1 (&-WH)	
	available with Weather-Max™ multi-layer foam and tight-	
	weave mesh vapor barrier backing. Installation – InvisiBall wall-mounting system included.	
	Two 6 mm attachment points (on top and bottom) for	
	optional MTC-28WMG-1 (&-WH) U-bracket. Secondary	
	safety attachment loop point on back panel.	
	Agency Rating – ROHS-compliant; Transformer UL	
	Recognized per UL1876	
	Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when	
	mounted on InvisiBall wall-mount bracket; Net Weight –	
	6.8 kg (15.0 lbs)	
	One (1) year warranty	
	Designed metal housing with distinctive Aesthetic and	
	ergonomic style Interchangeable capsule module with premium	
	condenser	
	Patented capsule suspension design virtually Eliminates	
6.13 Two (2) sets	vibration and handling noises	
` '	Built-in high-efficiency antenna	
Dual Handheld	Backlit LCD displays all operational parameter information	
Microphone	Provides precise and rapid frequency sync to the	
	receiver	
	Technical Specifications	
	Frequency Range – UHF 478 – 931 MHz	
	Bandwidth – 21 MHz	
	Oscillation Mode – PLL Synthesized	

-	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power syst	
	ay-to-day operation of delivery units and information EN's customers, partners and stakeholders.
	RF Output Power - 9 ~ 27mW (country dependent) Deviation - < ± 40 kHz Spurious Emissions < -53 dBc LCD Display - Group, Channel, Battery status & error codes Max. SPL - 135 dB SPL Battery Type - 2 × AA alkaline Operating Time - Min. 12 hours (Low Power) Current Consumption - Approx. 92 mA Dimensions - (Ø × L) 51 × 234 mm 2 × 9.2 " Net Weight - Approx. 251 g 8.9 oz
6.14 One (1) lot Speaker cable transparent #16 AWG,	(XLR Male to XLR Female 1m), 3.5mm stere plug-2 X RCA Plug (1.5m)
Interconnector	
7. PABX EQUIPMENT	
7.1 One (1) set PBX Main Unit	Support Multi-site networking. SIP Networking for Low cost. Flexible expansion by adding activation key. Support small to large communication system. Up to maximum 992 (with DXDP 1152) Extensions. Built-in support for Advanced IP extensions as well as standard SIP phones. Easy Migration to IP SIP trunking Integrated SIP telephony via ITSPs* and other SIP trunk Providers. It is a high intuitive PC Based application suit that blend powerful point and click telephony. Wireless Mobility Solutions. Built-in and Optional Voice Mail Processing system. Reduced Total Cost of Ownership.
7.2 Two (2) sets 24-Port SLT Extension Card	Physical Extension Cards with Caller ID and Message Lamp Card
7.3 One (1) set 8- port Digital Extension Card	Physical Extension Cards
7.4 One (1) set Power Supply unit	L-Type
7.5 One (1) set Back-up battery Cable	included
7.6 One (1) set 16- ch VoIP DSP Card	16 channel digital signal processor card with one 4 channel IP trunk SHGW4 activation key and one 8

	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	d Control System with provision for anti-static Compliance
setup and power sys	tem for a data center
Purpose: To support of	ay-to-day operation of delivery units and information
exchange among AMC	EN's customers, partners and stakeholders.
	channel IP proprietary telephone IPPT8 activation key
	pre-installed
	Compliant with ITU-T G.729a and G.711 codec methods
	Mounts on IPCMPR card
	3-Line Backlight LCD Display; 24 Flexible CO Buttons
	Full Duplex Speakerphone; EHS Support
	Specifications:
	Main LCD Display (Lines/Characters) – 3/16
	LCD Backlight- Yes
	Flexible CO Keys – 24
7.7 Three (3) sets	Navigator Keys- Yes
3-Line LCD Digital	Soft Keys – 4
_	Call Log Incoming/Outgoing Calls- Yes / Yes
Proprietary	Speakerphone - Yes (Full Duplex)
Telephone	Headset Port – Yes
	Electric Hook Switch (EHS)*1 – Yes
	Dimensions (mm) *2 (Width × Depth × Height)
	High Position267×170×180Low
	Position267×187×155Weight (g)*31070ColorBlack,
	White
	1-line Graphical LCD with backlighting; 8 freely
	programmable function keys; Speaker Phone, handset
	and headset with full duplex; Available in black and
	white colour
	Specification:
	LCD Type - Graphic
	LCD Dots (W x H) 160 x 18
	LCD Line 1
	LCD Character 16
	LCD Backlight Yes (On/Automatic/Off) Headset Yes (2.5
	mm audio jack) Full Duplex
7.8 One (1) set 1-	Electronics Hook Switch (EHS) No
Line Digital	Speakerphone Yes (Full Duplex)
Proprietary	External Expansion 1 DXDP port
Telephone	Bluetooth (for Headset) No
reichingine	DXDP Yes
	XDP No
	Data Transmission Capability PBX to DPT: Cable fÓ0.5
	mm 500 m DPT to DPT: Cable fÓ0.5 mm 50 m
	Wall Mount Kit Yes (Option)
	Dimension (W x D x H mm) LOW: 205 x 160 x 170
	FF Keys 8
	Soft Keys No
	0-9, *, # Keys Yes
	Redial Key Yes
	Flash/Recall Key Yes

•	(1) Lot IT System (Server, Switch, LAN, WAN, Statement o	f
	Control System with provision for anti-static Compliance	
setup and power system Purpose: To support day	/-to-day operation of delivery units and information	
	N's customers, partners and stakeholders.	
	Hold Key Yes	
	SP-Phone Key Yes	
	Auto Answer/Mute Key Yes	
	Auto Dial/Store Key Yes	
	Transfer Key Yes	
	Intercom Key Yes	
	Pause Key - Yes	
	CONF Key - Yes	
	FWD/DND Key No	
	Message Key Yes	
	Navigator Key No	
	4-Directions Key Yes	
	Cancel Key No	
	LED Message/Ringer Lamp Yes (Green/Red) LED FF	
	Keys Yes (Green/Red) LED Intercom Yes	
	(Green) LED SP-Phone Yes	
	(Red) LED Auto Answer/Mute Yes (Red) LED Auto	
	Dial/Store Yes	
	(Red) LED CONF No LED FWD/DND Yes (Red)	
	Message/Ringing Lamp Yes	
	OHCA Yes Bluetooth Headset Adapter No Auto Redial	
	No Off-Hook Monitor Yes Handset/Headset Mic Mute	
	Yes Speakerphone Mic Mute Yes	
	Phone Directory Yes	
	Feature Access No	
	Outgoing Call Log Yes	
	Incoming Call Log Yes	
	Audio Codec Yes (G.711)	
	USB Unit I/F No	
	System Programming No	
	Station Programming Yes*1	
	Electric Volume Headset 6 levels	
	Electric Volume Handset 6 levels	
	Electric Volume Speakerphone 8 levels Electric Volume	
	Ringer 4 + Off	
	LCD Contrast 4 levels	
	Tones/Music Ring Tone 8	
	Tones/Music on Hold No (Tone)	
	Footnote *1 To operate by PROGRAM Key or PAUSE	
70 One (1) cot 1	Key	
7.9 One (1) set 4-	4-Channel H.323/SIP Gateway Activation Key	
Ch IP Trunk	, ,	
7.10 Twelve (12)	Integrated Telephone System	
` ,	Choice of Five Colors: black, white, red, dark	
sets Basic Single	blue and grey; Wall Mountable; Last Number	
Line Telephone	Redial; Timed Flash	
	readial, filliou fidori	

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	Control System with provision for anti-static Compliance
setup and power syste	y-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
oneriange amerig / amer	Electronic Volume Control; 3-Step Ringer
	Selector
	Switchable Tone/Pulse Settings
	Specifications:
	Dial Mode: Tone (DTMF)/pulse
	Redial: One-touch (32 digits)
	Flash: 600 ms
	Power Source: Telephone line
	Dimensions (H x W x D): 96 mm x 150 mm x
	200 mm
	Weight: 475 g
7.11 One (1) set	vveignt. 475 g
AVR 1000W	included
7.12 Three (3) sets	included
12V Battery	
7.13 Five (5) sets Krone Terminal	included
7.14 Three (3) sets Amphenol Cable	included
with Head	included
with nead	
8. Supply and	
installation of IT	
equipment for the	
data center and	
other ICT	
equipment.	
Including	
(Refrigerant piping	
type M hard drawn	included
copper pipe) and	
ACCU to FCU	
electrical power	
supply (THHN	
Philflex) with PVC	
flexible conduit. 1"	
diameter PVC	
condensate drain	
condensate diam	

	-	
		1) Lot IT System (Server, Switch, LAN, WAN, Statement of
,,		ontrol System with provision for anti-static Compliance
Setup and power syst		
		o-day operation of delivery units and information s customers, partners and stakeholders.
pipe including		s customers, partners and stakenolucis.
insulating using		
3/8" thick rubber		
insulation wrapped		
with polyethylene		
tape. Installation of		
FM200. installation		
of fire suppression		
control panel,		
• '		
programming and configuration.		
monitoring and		
access control		
system,		
configuration,		
testing and		
commissioning.		
PABX installation,		
tracing,		
termination,		
programming and		
testing. Tracing,		
termination and		
programming for		
HD visual		
communication		
system, projectors		
and audio system.		
Testing and		
commissioning of		
all equipment,		
miscellaneous and		
consumables and		
training of all the		
system and		
integration.		
9. OTHER		

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
	Control System with provision for anti-static Compliance	
setup and power syste		
	ny-to-day operation of delivery units and information	
<u> </u>	EN's customers, partners and stakeholders.	
REQUIREMENTS		
	9.1 To ensure the quality of service, the	
	contractor shall submit the following	
	documents:	
	Supplier must have at least five (5) years of experience	
	in supply, delivery, installation, testing and	
	commissioning of network equipment and structured	
	cabling system / Data Center Solution.	
	Supplier must have completed at least one (1) similar	
	projects in supply, delivery, installation, testing and	
	commissioning of network equipment and Data Center	
	Solution.	
	The supplier shall submit implementation time-line that	
	reflects all the milestones in Gantt chart.	
	Supervised by a Certified License Electronics and	
	Communication Engineer.	
	Supplier must have at least Three (3) Certified Data	
	Center Professionals (CDCP) duly employed by the	
	company for at least 5 years and above.	
	Managed by a registered Project Manager (PM) and shall	
	submit a certificate issued by the Project Management	
	Institute (PMI).	
	Contractors must have Philippine Contractors	
	Accreditation Board (PCAB) licenses required by Republic Act 4566 to perform	
	telecommunications/communications installations.	
	The contractor shall be responsible for all required	
	permits.	
9.2 Maintenance /	One (1) year maintenance with quarterly preventive	
Support	maintenance visit	
	One (1) year parts and services	
9.3 Warranty	One (1) year Workmanship	
	Operations and Maintenance Training prior to the	
O 4 Training	acceptance of the project. Including lectures and actual	
9.4 Training	demonstration for at least 8 hours for minimum of ten	
	(10) participants.	
9.5 Delivery /	Project must be completed within 120 days upon receipt	
Project Duration	of Notice to Proceed	
9.6 Operations &		
Maintenance	Included	
Manual (English)		

- (vi) Section VIII. Bidding Forms.
- (vii) For foreign bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item or product.

13. Documents Comprising the Bid: Financial Component

a) Unless otherwise stated in the **<u>BDS</u>**, the financial component of the bid shall contain the following:

- (a) Financial Bid Form, which includes bid prices and the applicable Price Schedules, in accordance with **ITB** Clauses 15.a) and 15.d);
- (b) If the Bidder claims preference as a Domestic Bidder, a certification from the DTI issued in accordance with **ITB** Clause 27, unless otherwise provided in the **BDS**; and
- (c) Any other document related to the financial component of the bid as stated in the **BDS**.
- b) (a) Unless otherwise stated in the **BDS**, all bids that exceed the ABC shall not be accepted.
 - (b) Unless otherwise indicated in the <u>BDS</u>, for foreign-funded procurement, a ceiling may be applied to bid prices provided the following conditions are met:
 - (i) Bidding Documents are obtainable free of charge on a freely accessible website. If payment of Bidding Documents is required by the procuring entity, payment could be made upon the submission of bids.
 - (ii) The procuring entity has procedures in place to ensure that the ABC is based on recent estimates made by the responsible unit of the procuring entity and that the estimates reflect the quality, supervision and risk and inflationary factors, as well as prevailing market prices, associated with the types of works or goods to be procured.
 - (iii) The procuring entity has trained cost estimators on estimating prices and analyzing bid variances.
 - (iv) The procuring entity has established a system to monitor and report bid prices relative to ABC and engineer's/procuring entity's estimate.
 - (v) The procuring entity has established a monitoring and evaluation system for contract implementation to provide a feedback on actual total costs of goods and works.

14. Alternative Bids

- 14.1 Alternative Bids shall be rejected. For this purpose, alternative bid is an offer made by a Bidder in addition or as a substitute to its original bid which may be included as part of its original bid or submitted separately therewith for purposes of bidding. A bid with options is considered an alternative bid regardless of whether said bid proposal is contained in a single envelope or submitted in two (2) or more separate bid envelopes.
- 14.2 Each Bidder shall submit only one Bid, either individually or as a partner in a JV. A Bidder who submits or participates in more than one bid (other than as

a subcontractor if a subcontractor is permitted to participate in more than one bid) will cause all the proposals with the Bidder's participation to be disqualified. This shall be without prejudice to any applicable criminal, civil and administrative penalties that may be imposed upon the persons and entities concerned.

15. Bid Prices

- a) The Bidder shall complete the appropriate Schedule of Prices included herein, stating the unit prices, total price per item, the total amount and the expected countries of origin of the Goods to be supplied under this Project.
- b) The Bidder shall fill in rates and prices for all items of the Goods described in the Schedule of Prices. Bids not addressing or providing all of the required items in the Bidding Documents including, where applicable, Schedule of Prices, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non-responsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the Government, except those required by law or regulations to be accomplished.
- c) The terms Ex Works (EXW), Cost, Insurance and Freight (CIF), Cost and Insurance Paid to (CIP), Delivered Duty Paid (DDP), and other trade terms used to describe the obligations of the parties, shall be governed by the rules prescribed in the current edition of the International Commercial Terms (INCOTERMS) published by the International Chamber of Commerce, Paris.
- d) Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - (a) For Goods offered from within the Procuring Entity's country:
 - (i) The price of the Goods quoted EXW (ex works, ex factory, ex warehouse, ex showroom, or off-the-shelf, as applicable);
 - (ii) The cost of all customs duties and sales and other taxes already paid or payable;
 - (iii) The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - (iv) The price of other (incidental) services, if any, listed in the **BDS**.
 - (b) For Goods offered from abroad:
 - (i) Unless otherwise stated in the <u>BDS</u>, the price of the Goods shall be quoted DDP with the place of destination in the Philippines as specified in the <u>BDS</u>. In quoting the price, the Bidder shall be free to use transportation through carriers

registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.

- (ii) The price of other (incidental) services, if any, listed in the **BDS**.
- (c) For Services, based on the form which may be prescribed by the Procuring Entity, in accordance with existing laws, rules and regulations
- e) Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or price escalation on any account. A bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected, pursuant to **ITB** Clause 24.

All bid prices for the given scope of work in the contract as awarded shall be considered as fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances. Upon the recommendation of the Procuring Entity, price escalation may be allowed in extraordinary circumstances as may be determined by the National Economic and Development Authority in accordance with the Civil Code of the Philippines, and upon approval by the GPPB. Nevertheless, in cases where the cost of the awarded contract is affected by any applicable new laws, ordinances, regulations, or other acts of the GOP, promulgated after the date of bid opening, a contract price adjustment shall be made or appropriate relief shall be applied on a no loss-no gain basis.

16. Bid Currencies

- a) Prices shall be quoted in the following currencies:
 - (a) For Goods that the Bidder will supply from within the Philippines, the prices shall be quoted in Philippine Pesos.
 - (b) For Goods that the Bidder will supply from outside the Philippines, the prices may be quoted in the currency(ies) stated in the **BDS**. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate as published in the *Bangko Sentral ng Pilipinas* (BSP) reference rate bulletin on the day of the bid opening.
- b) If so allowed in accordance with **ITB** Clause a), the Procuring Entity for purposes of bid evaluation and comparing the bid prices will convert the amounts in various currencies in which the bid price is expressed to Philippine Pesos at the foregoing exchange rates.
- c) Unless otherwise specified in the <u>BDS</u>, payment of the contract price shall be made in Philippine Pesos.

17. Bid Validity

- a) Bids shall remain valid for the period specified in the <u>BDS</u> which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.
- b) In exceptional circumstances, prior to the expiration of the bid validity period, the Procuring Entity may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. The bid security described in **ITB** Clause 18 should also be extended corresponding to the extension of the bid validity period at the least. A Bidder may refuse the request without forfeiting its bid security, but his bid shall no longer be considered for further evaluation and award. A Bidder granting the request shall not be required or permitted to modify its bid.

18. Bid Security

a) The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount stated in the <u>BDS</u>, which shall be not less than the percentage of the ABC in accordance with the following schedule:

Form of Bid Security	Amount of Bid Security (Not Less than the Percentage of the ABC)
(a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank. For biddings conducted by LGUs, the Cashier's/Manager's Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.	
(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank. For biddings conducted by	Two percent (2%)
LGUs, Bank Draft/Guarantee, or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument.	

(c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.

Five percent (5%)

The Bid Securing Declaration mentioned above is an undertaking which states, among others, that the Bidder shall enter into contract with the procuring entity and furnish the performance security required under ITB Clause 33.2, within ten (10) calendar days from receipt of the Notice of Award, and commits to pay the corresponding amount as fine, and be suspended for a period of time from being qualified to participate in any government procurement activity in the event it violates any of the conditions stated therein as provided in the guidelines issued by the GPPB.

- b) The bid security should be valid for the period specified in the <u>BDS</u>. Any bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- C) No bid securities shall be returned to Bidders after the opening of bids and before contract signing, except to those that failed or declared as post-disqualified, upon submission of a written waiver of their right to file a request for reconsideration and/or protest, or upon the lapse of the reglementary period to file a request for reconsideration or protest. Without prejudice on its forfeiture, bid securities shall be returned only after the Bidder with the Lowest Calculated Responsive Bid (LCRB) has signed the contract and furnished the performance security, but in no case later than the expiration of the bid security validity period indicated in **ITB** Clause b).
- d) Upon signing and execution of the contract pursuant to **ITB** Clause 32, and the posting of the performance security pursuant to **ITB** Clause 33, the successful Bidder's bid security will be discharged, but in no case later than the bid security validity period as indicated in the **ITB** Clause b).
- e) The bid security may be forfeited:
 - (a) if a Bidder:
 - (i) withdraws its bid during the period of bid validity specified in **ITB** Clause 17;
 - (ii) does not accept the correction of errors pursuant to **ITB** Clause 28.c)(b);
 - (iii) has a finding against the veracity of any of the documents submitted as stated in **ITB** Clause 29.2;
 - (iv) submission of eligibility requirements containing false information or falsified documents;

- (v) submission of bids that contain false information or falsified documents, or the concealment of such information in the bids in order to influence the outcome of eligibility screening or any other stage of the public bidding;
- (vi) allowing the use of one's name, or using the name of another for purposes of public bidding;
- (vii) withdrawal of a bid, or refusal to accept an award, or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the LCRB;
- (viii) refusal or failure to post the required performance security within the prescribed time;
- (ix) refusal to clarify or validate in writing its bid during postqualification within a period of seven (7) calendar days from receipt of the request for clarification;
- (x) any documented attempt by a Bidder to unduly influence the outcome of the bidding in his favor;
- (xi) failure of the potential joint venture partners to enter into the joint venture after the bid is declared successful; or
- (xii) all other acts that tend to defeat the purpose of the competitive bidding, such as habitually withdrawing from bidding, submitting late Bids or patently insufficient bid, for at least three (3) times within a year, except for valid reasons.
- (b) if the successful Bidder:
 - (i) fails to sign the contract in accordance with **ITB** Clause 32; or
 - (ii) fails to furnish performance security in accordance with **ITB** Clause 33.

19. Format and Signing of Bids

a) Bidders shall submit their bids through their duly authorized representative using the appropriate forms provided in Technical Specifications

b)

Specifications and Requirements	Statement of Compliance
	Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements
	Specifications and Requirements

	of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by
	evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.a)(a)(ii) and/or GCC Clause 2.a)(a)(ii).

	(1) Lot IT System (Server, Switch, LAN, WA Control System with provision for anti-sta	
setup and power syst	m for a data center	
	y-to-day operation of delivery units and informati	on
exchange among AMC	N's customers, partners and stakeholders.	
Item Name:	Detailed Specifications:	
1. COOLING		
SYSTEM		
1.1 Two (2) units Air Conditioner	2.0HP Single split inverter type wall mounted 220 V 1P atleast 57 hZ, with wireless remote Cooling Capacity – 16,557 (2,983-17,500)	н

•	le (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
setup and power syst	d Control System with provision for anti-static Compliance
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
	Power Consumption – 1,487 (227-1,718)
	Energy Efficient / EER – 10.3 (12.5-9.9) Sound Level@ Low – at least 45/35.3/ 23.7
	Voltage, Frequency, Phase- 230-59-1
	Ozone Friendly Refrigerant : Type- R410-A
	Physical Data (Indoor Net Dimension) W X H X D- 793 X
	287 X 225 Physical Data (Outdoor Net Dimension) W X H X D –
	777 X 545 X 287
	Pipe Sizes (Liquid / Gas) – φ6.35 / φ12.7
	Maximum Pipe Length – at least 18.5
2. DATA CENTER,	One year warranty
POWER SYSTEM,	
MONITORING AND	
CONTROL	
SYSTEM	
	Control and Monitoring System: Supports Up to 6 intelligent sensor
	Virtual Sensors monitor power, Modbus, network
	devices, and other SNMP based equipment.
	Built-in graphing and data logging, internally or to a
	remote PC. Platform independent; free firmware upgrades and utilities. Enables Access Control of 2
	Doors using single Door Control unit
	Supports Internal Audio Speaker
	Supports Internal Microphone Support 6 Full Auto Sense RJ-45 ports
	At least 3x RJ-45 Expansion Ports
2.1 One (lot)	Capable of 10/100Mbps Ethernet Port
monitoring and	Embedded web server display sensor information and live video from connected cameras
_	Integrates with network management system via
	SNMPv1 and Encrypted SNMPv3
with provision for	Stream sensor information directly to cellphone or PDA ability to connect external GPRS/ GSM modem,
anti-static setup	Bluetooth and Wi-Fi USB adapters.
and power system	Uses Linux operating system
for a data center	One year warranty
	Power System:
	Supply and installation of cable ladders (150mm wide for cable raceway power cable, 300mm wide for cable
	raceway power cable, 300mm wide for cable
	Supply and Installation of 3-phase electrical power
	distribution system, electrical cabinet, convenience
	power outlets, LED lighting fixtures, switches, and all
	electrical materials and accessories, including feeder
	line wires and components, royal cords, THHN wires,
	main and sub breakers and panel boards for the UPS,
	AC, and other auxiliary systems inside the server room.

	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	d Control System with provision for anti-static Compliance
setup and power sys	tem for a data center
	lay-to-day operation of delivery units and information
exchange among AMC	CEN's customers, partners and stakeholders.
	Raise floor:
	Supply and installation of raised flooring
	Supply and installation of 900mm x 2100mm x 12mm
	glass panel door, top and bottom analog frame
	Inclusive of painting works (as needed) and finishing,
	raised flooring, with all restoration works required for a
	3m x 4m room
	Should be capable to be integrated to monitoring and
	control system through a software command control
2.2 One (1) set	application and platform.
Door Access	Capable of higher level of integration to the following system : CCTV Surveillance System, Car Parking,
	Intrusion System, Elevator / Lift Control, Point.
Control System	Includes fingerprint controller, Exit reader, power supply
	in metal enclosure, Mifare Cards.
	One (1) year Warranty
2.3 Two (2) pcs.	
Inline power Meter	23cm power in / out cable with bare ends
·	40 fact with consing machile attached 40 fact man
2.4 One (1) pc.	10 feet with sensing module, standard 18 feet non-
Rope water sensor	sensing cable and 8 feet sensing rope
2.5 One (1) pc.	
Single port	Extension cable 5ft included
temperature and	Extension capie on moraded
Humidity sensor	
2.6 One (1) pc.	
Airlink USB-based	Modem for text alert
GSM/GPRS	
SUPPRESSION	
SYSTEM	
	In accordance with the guidelines contained in NFPA 72
	(2002), approved by Factory Mutual (FM), ANSI 864, 9th edition, UL Listed to ANSI 864.
	Capable of suppressing surface burning fire in Class A,
	B and C hazzards. Ozone depleting potential (ODP) is
0.4.0(4) : (=1	zero
3.1 One (1) lot Fire	Component Specification: a. Beta cylinder assembly to be filled with at least 65
suppression	lbs and
system	36 lbs agent (1 unit)
	b. Complete Kit, with accessories, 24VDC
	c. Discharge Tube, Valve outlet adapter
	d. 360 degree Discharge Nozzle 8 port (2 Ea) e. Single releasing control Panel
	f. Back-up Battery. 12VDC (2 units)
	g. Smoke detector Ionization Sys Sensor

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center		
Setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. h. Smoke detector Photoelectric Sys Sensor i. Standard base two wire (4 units) j. Manual release station (1 unit) k. Abort toggle switch station l. at least 5.5" diameter fire alarm (1 unit) m. Horne strobe system sensor (1 unit) One (1) year warranty 4. SERVER Processor: 5198 2.1 Ghz 32-Core Xeon Gold Processors Chipset: Intel C621 Memory: at least 118gb DDR4 2666 ECC Registered; 10DIMM slots, Expansion Slots: atleast 3 x PCI-E 3.0 x 14 for Ad-do-mModule (AOM), 1 x PCI-E 3.0 x 3 NVMe M.2 slot Onboard LAN: 2 x 1GbE LAN ports via Intel C621 Onboard Graphics: ASPEED AS72500 BMC Storage Controller: Broadcom 3108 SAS / SATA add-on controller 2GB 1866MHz DDR3 on-card cache Storage 3 x 4TB SATA Enterprise 7200 RPM RAID 5 Drive Bays: atleast 6 x Hot-swap 3.5" SAS/SATA drive bays Power Supply: 998.5 W Redundant PSU Titanium Level (96% Efficiency) Cooling System: 3 x Hot-swap 7cm redundant PWM cooling fans, Format Factor: 2U Rackmount Three (3) years Warranty / 8 x 5 Next Business Days service, parts and labor With 595.5 X1069.5 C/W perforated doors w/ lock and key, slit slide panels, EIA Mounting rails; leveling feet: color black curved front door. A complete rack includes all of the following: 1. Rack Frame 2. Top cover 3. Front door 4. Split slide panels 5. Cage nuts, washer and screw (48 sets) 6. Vertical cable panels for cable and mounting of PDU (2pcs) 7. Foot levelers (4pcs) 8. Rack Connector (2sets-4pcs per rack) 9. All connection and accessories and screws 10. Rack basic PDU: at least 30A C20, 18way c13 + 2 way C18 meter, Black Warranty A sex per parts and screws 10. Rack basic PDU: at least 30A C20, 18way c13 + 2 way C18 meter, Black	•	
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h. Smoke defector Photoelectric Sys Sensor i. Standard base two wire (4 units) j. Manual release station (1 unit) k. Abort toggle switch station l. at least 5.5 diameter fire alarm (1 unit) m. Home strobe system sensor (1 unit) One (1) year warranty 4. SERVER Processor: 5198 2.1 Ghz 32-Core Xeon Gold Processors Chipset: Intel C621 Memory: at least 118gb DDR4 2666 ECC Registered; 10DIMM slots, Expansion Slots; atleast 3 x PCI-E 3.0 x 6 (FHHL), 2 x PCIE-E 3.0 x 3 NVMe M.2 slot Onboard LAN: 2 x 1GbE LAN ports via Intel C621 Onboard Graphics: ASPED AST2500 BMC Storage Controller: Broadcom 3108 SAS / SATA add-on-Controller 2GB 1866MHz DDR3 on-card cache Storage: 3 x 4TB SATA Enterprise 7200 RPM RAID 5 Drive Bays: atleast 6 x Hort-swap 3.5" SAS/SATA drive bays Power Supply: 998.5 W Redundant PSU Titanium Level (96% Efficiency) Cooling System: 3 x Hort-swap 7cm redundant PWM cooling fans, Format Factor: 2U Rackmount Three (3) years Warranty / 8 x 5 Next Business Days service, parts and labor Windows Sever Datacenter 2019 64Bit English 1pk DSP OEI DVD 24 Core 5.1 One (1) set 42U Rack With 595.5 X1069.5 C.W perforated doors w/ lock and key, slit slide panels, EIA Mounting rails; leveling feet; color black curved front door. A complete rack includes all of the following: 1. Rack Frame 2. Top cover 3. Front door 4. Split side panels 5. Cage nuts, washer and screw (48 sets) 6. Vertical cable panels for cable and mounting of PDU (2pcs) 7. Foot levelers (4pcs) 8. Rack Connector (2sets - 4pcs per rack) 9. All connection and accessories and screws 10. Rack basic PDU: at least 30A C20, 18way c13 + 2 way C18 Meters.	Purpose: To support d	ay-to-day operation of delivery units and information
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4.1 One (1) set 2U Rackmount Server 4.1 One (1) set 2U Rackmount Server 4.2 One (1) lic. Operating System 5. RACK SYSTEM AND PDUs 42U Rack 5.1 One (1) set 42U Rack 6. Vertical complete rack includes all of the following: 1. Rack Frame 2. Top cover 3. Front door 4. Split side panels 5. Cage nuts, washer and screw (48 sets) 6. Vertical cable panels for cable and mounting of PDU (2pcs) 7. Foot levelers (4pcs) 8. Rack Connector (2sets-4pcs per rack) 9. All connection and accessories and screws 10. Rack basic PDU: at least 30A C20, 18way c13 + 2 way C18 meter, plack 4.1. One (1) set 42U And one (1) set 42U		10DIMM slots, Expansion Slots: atleast 3 x PCI-E 3.0 x
slot Onboard LAN: 2 x 1GbE LAN ports via Intel C621 Onboard Graphics: ASPEED AST2500 BMC Storage Controller: Broadcom 3108 SAS / SATA add-on controller 2GB 1866MHz DDR3 on-card cache Storage: 3 x 4TB SATA Enterprise 7200 RPM RAID 5 Drive Bays: atleast 6 x Hot-swap 3.5" SAS/SATA drive bays Power Supply: 998.5 W Redundant PSU Titanium Level (96% Efficiency) Cooling System: 3 x Hot-swap 7cm redundant PWM cooling fans, Format Factor: 2U Rackmount Three (3) years Warranty / 8 x 5 Next Business Days service, parts and labor Windows Sever Datacenter 2019 64Bit English 1pk DSP OEI DVD 24 Core 5.1 One (1) set 42U Rack With 595.5 X1069.5 C/W perforated doors w/ lock and key, slit slide panels, EIA Mounting rails; leveling feet; color black curved front door. A complete rack includes all of the following: 1. Rack Frame 2. Top cover 3. Front door 4. Split side panels 5. Cage nuts, washer and screw (48 sets) 6. Vertical cable panels for cable and mounting of PDU (2pcs) 7. Foot levelers (4pcs) 8. Rack Connector (2sets-4pcs per rack) 9. All connection and accessories and screws 10. Rack basic PDU: at least 30A C20, 18way c13 + 2 way C18 meter, Black		
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11. Basic PDU, 8x14-14 Socket, 1U, Black		way C18 meter, Black
		11. Basic PDU, 8x14-14 Socket, 1U, Black

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance	
setup and power syste	·	
	y-to-day operation of delivery units and information	
	EN's customers, partners and stakeholders.	
3	Phil flex Royal Cord 3C #10 (55m)	
	Twist Lock Outlet Set 4 sets	
5.2 One (1) set of		
Console Table and	Standard office table and chair	
Chair		
6. IT EQUIPMENT		
& VIDEO		
CONFERENCING		
SYSTEM FOR		
BOARD ROOM,		
TRAINING ROOM		
& CONFERENCE		
ROOM		
	Support Multi-cast. Capable of Dual Network. Support	
	Cascade Mode Application. Capable of Recording with	
	USB Memory	
	Enabling High-Definition Web Conferences. Broadband	
	Stereo Full Duplex Audio. High quality video Full-HD	
	1080/60p Adjusts data traffic based on network congestion	
	through the use of Rate Control function. With Remote	
	Camera Control	
	With a unique Echo Canceller and with Smooth 2-way	
	conversation with broadband stereo. Easy-to-understand	
	remote lectures and seminars are conducted at multiple sites	
	Connect to a sub-camera to share zoom and still images	
	Compatible with other brand device. With Low	
6.1 One (1) set	Bandwidth Communication Support	
` '	External Control Interface Communication Method: SIP, H.323	
Video	Video Compression Method: H.260.5 (mainstream	
Conferencing Main	only), H.263, H.263+, H.263++ (reception only), H.263	
Unit	High Profile, H.263 Baseline Profile	
	Audio Compression Method: G.711 μ-law, A-law (3.4 kHz@64 kbps) G.722 (7.0 kHz@64 kbps) G.722.1 (7.0	
	kHz@32 kbps)	
	G.722.1 Annex C (14.0 kHz@48 kbps/24 kbps)	
	MPEG-4 AAC-LD Mono (7.0 kHz@32 kbps, 14.0	
	kHz@64 kbps, 22.0 kHz@96 kbps)	
	MPEG-4 AAC-LD Stereo (14.0 kHz@64 kbps, 22.0 kHz@96 kbps)	
	No. of Channels: G.711/G.722/G.722.1/G.722.1 Annex	
	C: 1	
	MPEG-4 AAC-LD Mono: 1/ MPEG-4 AAC-LD Stereo: 2	
	Remote Camera Control: H.223, H.279	
	(Zoom/Pan/Tilt/Preset) Dual Stream - Method: H.235 (H.321), BFCP (SIP)	
	Multi-Monitor: atleast 2 displays	
	No. of Applicable Resolution Frames - Main: Max.	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. 1080p 25 frames/second, Sub: Max. 1080p frames/second Encryption: SRTP (AES 126 bit), H.234 (AES 126 bit) **Other:** H.460 Communication Bandwidth: 253 kbps to 22 Mbps Video Compatible Resolutions*1: 176 x 144p, 352 x 240p, 352 x 288p, 512 x 288p, 640 x 480p, 704 x 480p, 704 x 576p, 768 x 432p, 800 x 600p, 1024 x 768p, 1280 720p. 1280 1280 x 800p, 1920 x 1080p No. of Frames: Max. 57 frames/second (for H.264 (q080t) Screen Display: Full-screen, Picture in Picture, Picture with Picture, Side by Side Audio: Echo canceller, Auto gain control, Stationary noise reduction, Lip synch, Equalizer, Mic mute Video Input: Camera*2: HDMI main x 1. HDMI sub x 1 Input resolution: 1280 x 720p, 1920 x 1080i, 1920 x 1080p PC: RGB x 1(Mini D-sub 13pin), HDMI x 1*2 Input resolution: VGA, SVGA, XGA, HD, WXGA, SXGA, FWXGA, WXGA+, WXGA++, UXGA, WSXGA+, Full-HD Video Output: HDMI x 2, HDMI x 1 (For own site/recording video), RCA x 1 (Component) Supported output resolutions: 1918 x 1080i, 1918 x 1080p Audio Input: Digital Boundary Microphone x 1 (KX-VCA001) Max. 4, Analogue Boundary Microphone x 1 (KX-VCA002) Max. 1, HDMI, Stereo mini-plug*3*4 x 1 (ø3.5 mm), RCA*5 (Stereo) x 1 Audio Output: HDMI*6, Stereo mini-plug*3*7 x 1 (ø3.5 mm), RCA*8 x 1 (Stereo) Network: RJ45 x 2 (1000BASE-T/100BASE-TX Full External Control: RS-232C x 1 (Also used for maintenance) Others: USB 2.0*9 x 1, Camera Control Terminal x 1 (Not used) No. of Simultaneous Connection Sites: 16 (Expandable up to 24) Content Sharing: PC (RGB/HDMI), Sub-camera (HDMI **USB Host Mode (USB Memory):** Updating Software, Recording. Import: Contact List / Profile*10 / Configuration Data / Encryption Data Start-up Delivery Screen Tree List Export: Contact List / Profile*10 / Configuration Data / Encryption Data **Delivery Tree List** USB Device Mode: USB Video Class: Version 1.0 USB Audio Class: Version 1.0 Network Protocol: TCP/IPv4, TCP/IPv6*11, UDP/IPv4, UDP/IPv6*11, DHCP,

DNS,

tem Description: One	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of	of
,,	Control System with provision for anti-static Compliance	
setup and power system		
	y-to-day operation of delivery units and information	
exchange among AMCE	N's customers, partners and stakeholders.	
	HTTP, HTTPS, TELNET, NTP Network Functions: Packet resending (ARQ), Forward	
	Error Correction (FEC),	
	Adaptive Rate Control (ARC), Reorder, Packet Shaping,	
	Arbitrary Port Setting, NAT Compatibility, Encryption,	
	IP Precedence/DiffServ Support External Control: Via Web Browser, Control by HTTP	
	CGI, TELNET, RS-232C	
	Connection Modes: IP mode, NAT Traversal mode, IP /	
	NAT Traversal mode	
	Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding	
	projecting parts)	
	Weight: Approx. 3.3 kg (approx. 7.3 lb)	
	Power Input: AC 100-240 V, -1.0 A, 45/55 Hz	
	Power Consumption: Maximum: approx. 70 W, Standby:	
	0.5 W	
	DC Power Input: DC 24 V, 2.5 A	
	Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F)	
	Operating Humidity: 10 % to 90 % (non-condensing)	
	Language: English, German, French, Italian, Spanish,	
	Dutch, Portuguese, Japanese, Russian, Chinese, Arabic With 1 free HDVC Mobile License for 1 year	
	One (1) year warranty	
	Maximum Pickup Range : Approx. 3.5 m (radius)	
	Pickup Method : Stereo / Monaural *11.5	
	"Microphone Unit : Unidirectional ECM microphone parts at least x 3"	
	Number of Connections : Maximum 4 microphones	
6.3 Three (3) set	Maximum Input Sound Pressure : 105 dBspl	
Video	Number of Terminals for Microphone Connection : 2 Dimensions : Approx. 118 mm (diameter) x 25 mm	
Conferencing	Cable Length : Approx. 7.5 m	
Microphone	Power Input : Supplied from main unit via proprietary	
	cable	
	Weight : Approx. 275 g Operating Temperature : 0 °C to 40 °C	
	Operating Humidity: 10 % to 90 % (non-condensing)	
	One (1) year warranty	
6.4 One (1) set	Dimensions (diameter x length) : 7 mm (cable outer	
Extension Cable	diameter) x 20 m Weight : 1.3 kg	
for Microphone	Operating Temperature : 0 °C to 40 °C	
unit	Operating Humidity: 10 % to 90 % (non-condensing)	
	Effective Pixels: 1918 x 1080i, 1918 x 1080p	
6.5 One (1) set	Pan / Tilt : Pan: ±95°, Tilt: ±19°	
Video Conference	Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view,	
Camera	80° (Wide end) – 29.5° (Tele end), Vertical angle of view	
Callicia	65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -,	
	F2.1 (Tele end); Presets : at least 10 positions	

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
, , , , , , , , , , , , , , , , , , ,	Control System with provision for anti-static Compliance
Setup and power systematics: To support do	
	ay-to-day operation of delivery units and information EN's customers, partners and stakeholders.
exertaings arrioring 7 tivios	Connection Cable : HDMI
	Dimensions (width x depth x height) : Approx. 130 mm x
	approx. 125 mm x approx. 134 mm
	Weight : Approx. 0.6 kg Operating Temperature : 0 °C to 40 °C
	Operating Humidity: 10 % to 90 % (non-condensing)
	One (1) year warranty
	Technology: Laser LCD. Brightness: at least 5 000 - 5 450 lumens. Power Supply AC 100-240 V, 45.5- 58 Hz
	Power Consumption: *1 435W (during standby) Approx.
	0.4 W (When [STANDBY MODE] is set to [ECO])
	Approx. 20 W (When [STANDBY MODE] is set to
	[NORMAL]) Approx. 47 W(When [IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is
	output, and USB memory is inserted in the terminal)
	Approx. 115 W(When [QUICK STARTUP] is set to [ON],
	[IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is output, and the power is
	supplied from the terminal
	BTU Value: Max 1,533BTU
	LCD Panel Panel Size: 17.3 mm (0.76 inches) diagonal (16:10 aspect ratio)
	LCD Panel Display Method:Transparent LCD panel (x
	3, R/G/B)
	LCD Panel Drive Method: Active matrix method LCD Panel Pixels:2,299,000 (1918 x 1198) x 3, total of
	6,899,000 pixels
	Light Source: Laser Diode Laser class 1(Class3R for US
6.6 One (1) set	models) Illumination Life of Set: Varies depending on operation
LCD Laser	mode setting. 20,000 hours at half luminance *
Projector	IEC62087: 2008 Broadcast contents, Dynamic contrast
	[2], Temperature: 30°C (86F), Under conditions of 0.15
	mg/m 3 of particulate matte Projection Size: 1.02–10.16 m (40–400 inches)
	diagonally, 16:10 aspect ratio
	Light output * 5 000 - 5 450 lumens (Input signals: PC,
	Operating mode: Normal, Dynamic mode) Center-to-Corner Uniformity: 90%
	Contrast Ratio: *1 2,999,000:1(all white/all
	black)(Dynamic Contrast 1 or 2) (Input signals: PC,
	Operating mode: Normal, Dynamic mode) Resolution: WUXGA 1918 x 1198 pixels
	Scanning Frequency RGB: fH: 15- 91kHz, fV: 24 -
	100Hz, dot clock: 162 MHz or less
	Scanning frequency YPBPR(YCBCR): 480i (525i): fH 15.73 kHz; fV 59.94 Hz, 576i (625i): fH 15.63 kHz; fV 50
	Hz, 480p (525p): fH 31.47 kHz; fV 59.94Hz, 576p
	(625p): fH 31.25 kHz; fV 50 Hz, 720 (750)/60p: fH 45.00
	kHz; fV 60 Hz, 720 (750)/50p: fH 37.50 kHz; fV 50 H z, 1080 (1125)/60i: fH 33.75 kHz; fV 60 Hz, 1080
	(1125)/50i: fH 28.13 kHz; fV 50 Hz, 1080 (1125)/25p: fH
	28.13 kHz; fV 25 Hz, 1080 (1125)/24p: fH 27.00 kHz; fV
	24 Hz, 1080 (1125)/24sF: fH 27.00 kHz; fV 48 Hz, 1080

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. (1125)/30p: fH 33.75 kHz; fV 30 Hz, 1080 (1125)/60p: fH 67.50 kHz; fV 60 Hz, 1080 (1125)/50p; fH 56.25 kHz; fV Scanning Frequency | Video: fH: 14.70 kHz / 15.20 kHz fV: 55.55 Ηъ 45.5 [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM] Scanning Frequency | HDMI/DIGITAL LINK: · Moving image signal resolution: 480i (525i)*2, 576i (625i)*2, 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/50i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sF, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p Still image signal resolution: 640 x 400 to 1920 x 1200 (noninterlace) · Dot clock frequency: 25 MHz to 162 MHz Optical Axis Shift: Vertical ±67%, Horizontal ±35% (Supplied lens/ET-ELS20/ET-ELW20/ET-ELT20/ET-ELT21) Vertical ±60%, Horizontal ±30% (ET-ELW22) NOTE: Optical axis shift function cannot be operated

free installation

Speaker: 3.5 cm round-type x 1

when used with the ET-ELW21.

Maximum Usable Volume Output: 8.5 W (monaural)

Terminals | HDMI 1 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals : Linear PCM (Sample frequency : 45 kHz/44.1 kHz/32 kHz)

Installation: Ceiling/desk/AUTO, front/rear, 360 degree

Terminals | HDMI 2 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals : Linear PCM (Sample

frequency: 45 kHz/44.1 kHz/32 kHz)

Terminals | RGB 1 In: BNC (female) x 4, RGB/Y PB/PR (CB/CR)

Terminals | RGB 2 In: D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR)

Terminals | Monitor Out:D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR)

Terminals | Video In:Pin jack x 1

Terminals | Audio In 1: M3 stereo jack x 1(L-R)

Terminals | Audio In 2: M3 stereo jack x 1(L-R)

Terminals | Audio In 3: Pin jack x 2(L-R)

Terminals | Variable Audio Out: M3 jack, 0 V[rms] to 2.0 V[rms] variable, output imedance 2.2 k ohms and less

Terminals | Serial In: D-sub 9 pin, RS-232C compliant, for computer control use

Terminals | REMOTE 1:D-Sub 9 p (female) x 1, for external control (parallel)

Terminals | REMOTE 2:M3 jack x 1(L-R) for link control (for wired remote control)

Terminals | LAN: RJ-45 x 1 for network connection, 10/100Base-TX, compliant with PJLink™(Class 2)

Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK (video/network/serial control) connection, 100Base-TX, compliant with PJLink™(Class 2), Deep Color, HDCP

	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
etc.), Monitoring and	d Control System with provision for anti-static Compliance
setup and power syst	tem for a data center
Purpose: To support of	lay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
	Terminals VIEWER / PAIRING: USB type-A x 1
	Terminals DC Out: USB type-A x 1(DC 5V, 2A(Max))
	Power Cord Length:3.0m(9ft 10in)
	Noise Level: *1 32dB (Operating mode: NORMAL/ECO),
	26dB (Operating mode: QUIET) Operating environment Temperature: 0°C (32°F) to
	45°C (113°F) The projector cannot be used at an
	altitude of 2,700 m (8,858') or higher above sea level.
	The light output may decrease to protect the projector
	when the operating environment temperature exceeds
	36 °C (96.8 °F).
	Operating Environment Humidity: 20% to 80% (no
	condensation) One (1) year warranty
0.7.0	Support at least 20+3*10/100/1000M RJ45 ports and
6.7 One (1) pc.	2*1000M uplink SFP fiber slot ports, port 1-23 can
Unmanaged PoE	support IEEE 802.3af/at PoE standard, Built-in 235W
fiber switch	power supply. Support 1U/18 inch rack installation.
	Supports 802.11ac standard Simultaneous 2.4GHz 300
6.8 One (1) pc.	Mbps and 5GHz 867 Mbps connections for 1198 Mbps
Router	of total available bandwidth
	Laser LCD, 4,500 – 4,900 lumens, WUXGA
	Compact and lightweight body bringing high brightness
	dynamic image
	Long lasting laser light source provide consistent
	brightness
	1.3 x zoom and wide horizontal and vertical lens shift for flexible installation
	Long lasting laser light source and low-maintenance
	design provide high brightness and superb image quality
	Light output*1: 4,500 – 4,900 lumens
	Technology: Laser LCD
	LCD panel Panel size (mm): 14 mm diagonal (15:9 aspect ratio)
	LCD panel Panel size (inch): 0.62 inch diagonal (15:9
	aspect ratio)
6.9 Two (2) sets	LCD panel Display method: Transparent LCD panel (x
Laser Projector	3, R/G/B)
	LCD panel Drive method: Active matrix LCD panel Pixels: 2,304,000 (1918 x 1198) x 3, total of
	5,500,000 pixels
	LENS: 1.6 x Manual zoom (throw ratio 1.09-1.77 :1), F =
	1.60-2.12, f = 15.30-24.64 mm
	Light source: Laser diode
	Screen size (diagonal) (mm): 0.76 - 7.62 m, 16:10
	aspect ratio Screen size (diagonal) (inch): 25-298 in, 15:9 aspect
	ratio
	Center-to-corner uniformity*1: 85%
	Contrast*1: 2,999,000:1 (all white/all black) (Input
	signals:PC,LIGHT POWER:NORMAL,PICTURE
	MODE:DYNAMIC,DAYLIGHT WIEW:OFF,DYNAMIC
	CONTRAST:[1],AUTO POWER SAVE:OFF)

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center

Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders.

Resolution: 1918 x 1198 pixels

Optical axis shift | Vertical (from center of screen): 0 % -+44 % (Manual)

Optical axis shift | Horizontal (from center of screen): - 20% - +20% (Manual)

Keystone correction range*2: Vertical: ±22°, Horizontal: ±33°

Installation: Horizontal/Vertical, free 360-degree installation

Terminals | HDMI 1/2 IN: HDMI 18-pin x 2 (Compatible with HDCP, Deep Color, 4K/30p signal input)

Terminals | COMPUTER 1 IN: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR)

Terminals | COMPUTER 2 IN / MONITOR OUT: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) (input/output switching)

Terminals | VIDEO IN: Pin jack x 1

Terminals | AUDIO 1/2 IN: M3 stereo mini-jack x 2

Terminals | AUDIO 3 IN: Pin jack (L/R) x 1

Terminals | VARIABLE AUDIO OUT: M3 stereo minijack x 1

Terminals | SERIAL IN: D-sub 9-pin x 1 for computer control (RS-232C compliant)

Terminals | LAN: RJ-45 x 1 for network control, 10Base-T, 100Base-TX, compatible with PJLink™ (Class 2)

Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK connection, HDBase-T™ complian, 100Base-TX, compatible with PJLink™ (Class 2), HDCP, Deep Color, 4K/28p signal input

Terminals | USB CONNECTOR: USB connector (Type A) x 1 for Memory Viewer function, power supply (DC5V

A) x 1 for Memory Viewer function, power supply (DC5V, maximum 2A*3), optional wireless module AJ-WM50

Power supply: AC 100-240 V AC, 45/55 Hz

Power consumption: TBD

Built-in Speaker: 10 W (monaural)

Operating noise*1: NORMAL: 35dB, QUIET: 27dB

Cabinet materials: Molded plastic

Filter: Included

Filter cleaning cycle: 18,500 hours (0.08 mg/m3 of particulate matter), 9,900 hours (0.15 mg/m3 of particulate matter)

particulate matter)

Dimensions (W x H x D) (mm): 399 x 115 x 348 mm (Not including protruding parts)397 x 131 x 344 mm (With feet at shortest position)

Dimensions (W x H x D) (inch): 15 23/32 x 4 17/32 x 13 11/16 inch (Not including protruding parts)15 23/32 x 5

1/4 x 13 11/16 inch (With feet at shortest position) Weight (kg)*4: 7.2 kg

Weight (lbs.)*4:15.87 lbs.

Operating environment (°C/M): Operating temperature: 0 °C- 45 °C, operating humidity: 20 %-80 % (no condensation)

Operating environment (°F/Feet): Operating temperature: 32 °F -113 °F, operating humidity: 20 %-80

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	le (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
, ·	d Control System with provision for anti-static Compliance
setup and power syst	
	ay-to-day operation of delivery units and information
exchange among AMC	EN's customers, partners and stakeholders.
	% (no condensation) Applicable software/application: Logo Transfer Software,
	Multi Monitoring & Control Software, Presenter Light for
	Windows®, Wireless Projector Apps for iOS/Android™
	With Ceiling mount bracket
	One (1) year warranty
	Installation Options: Floating Wall Mount / Ceiling Mount
6.10 Three (3) pcs.	/ Suspended Mount (using the "L bracket"). Control
102.5" Motorized	Options: IR / RF / RS485 + Dry Contact Control / 3-12
Screen (15:9)	Voltage Trigger Control / Central Control / IP. Control - •
` '	Colour: Black / Whit• Aluminum Casing
	Minimum of 61W , 97 Volt
	Height- rack units (1U=43 mm) in U : 2
	Depth (incl front) in mm : at least 293 Emergency power supply: 24 VDC
	Output power RMS 100 volts in watts : 63
	Dynamic output power 100 volts in watts: 63
	Output power tappings: 97 – 67 volts – 7 ohms
	MIC inputs balanced: 2
	Line input unbalanced: 1
	Priority switch : 1 Chime : yes
	Priority output : 0
	Frequency response (in Hz) : 59 – 17 k
	Applicable in 100V: yes
	Net weight product (kg): 5.39
	Depth (build in) in mm : 273 Power supply : 115 - 230 VAC
	Power consumption (max) in watts : 167
	Output power RMS 8 ohms in watts : 63
C 44 T (0)	Minimum impedance load in ohms : 7
6.11 Two (2) sets	Zone outputs : 1
Amplifier System	Inputs with Phantom power : 2
	Tone control yes VOX mute: yes
	Emergency input: 0
	Priority levels : 2
	Cooling system: convection
	Applicable low impedance : yes
	Includes one (1) unit Multimedia player system:
	HDMI Full HD Support; Full HD Video; Full HD Sound;
	Full HD Microphone
	User Contents Foot USB to HDD Transfer
	- Fast USB to HDD Transfer
	- Edit (Rename, Delete, Modify)
	- Auto Song Numbering assignment
	Recording function
	- MTV, Chorus, MIDI may be recorded
	- Transfer Recordings to USB
	- Edit (Rename, Delete, Modify)

Item Description: On	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	Control System with provision for anti-static Compliance
setup and power system	em for a data center
Purpose: To support da	ay-to-day operation of delivery units and information
exchange among AMCI	EN's customers, partners and stakeholders.
	- External USB HDDs Supported via USB connectivity
	Multimedia Function
	- Full Playback Function
	- avi, rmbv, mkv, mpg, wmv, etc.
	- mp3, wma, aac, wav, etc.
	- jpg, bmp, gif, etc.
	Specifications:
	Processor: Cortex-A9 1.2GHz Dual core
	RAM: DDR3, 1GB Memory
	Operating System: Android 4.2 Jelly Bean
	Storage: 1TB HDD
	Microphone Input: Two (2) slots available
	Microphone Volume: Available
	Echo Volume: Available
	USB Compatibility: Two (2) USB 2.0 Port
	LED Backlit Buttons: Available
	TV Input Channel: HDMI
	: Video Out
	:YPbPr Video Out
	:Composite Video Out
	Background Video Input: Two (2) Input Available
	Audio Output :Analog Audio Out
	:Optical Audio Out
	:Coaxial Audio Out
	Components
	At least 7" woofer with woven fiberglass cone 1" PEI diaphragm tweeter with fluid cooling
	Contemporary, high-design appearance
	Built-in InvisiBall® mounting hardware, plus available U-
	bracket
	Weather resistant enclosure and transducers
	Wide 90° x 90° coverage
	115W power handling (235W program) in direct 7Ω setting, plus built-in 55W 65V/95V multi-tap transformer
	High fidelity sound character with broad frequency
6.12 Four (4) sets	response of 40 Hz – 18 kHz
` '	System
Wall Speaker	Frequency Range (-10 dB) - 40 Hz – 18 kHz
	Frequency Response (±3 dB) - 60 Hz – 15 kHz
	Power Rating: 235W Continuous Program (2 hrs) 118W (475W peak), Continuous Pink Noise (2 hrs) 90W (360W
	peak) Continuous Pink Noise (2 nrs) 9000 (30000)
	Maximum Input Voltage – 27.5 V RMS (2 hrs), 55.0 V
	peak
	Maximum SPL3 – 112 dB ave. Continuous Pink Noise
	(118 dB peak)
	Sensitivity – 91 dB, 1W/1m (ave. 100 Hz – 10 kHz) Coverage Angle - 90° x 90°
	Directivity Factor (Q) - 7.3 (averaged 1kHz – 16kHz)
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esc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Directivity Index (DI) = 8.38d (sveraged 14Hz − 16kHz) Nominal Impedance − 7 ohms (THRU setting) Crossover Type − 2hd order low-pass, 1st order high-pass, plus conjugate shaping Creuitry Transformer Taps − 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting; 7D nominal Recommended Protective High-Pass − 6 45 Hz high-pass (24 dB/oct) for 8D operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency − 198 mm (8 in), woven-fiberglass cone with pure butly rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency − 23 mm (1 in) PEI diaphragm, low-viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating, MTC-28WMG-1 (&-WH) available with Weather-Max™ multi-layer foam and tight-weave mesh vapor barrier backing, Installation - InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) U-bracket. Secondary safely attachment loop point to back panel. Agency Raing - ROHS-compliant; Transformer UL Recognized per UL1876 Dimensions (Hx W X D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight - 6.8 kg (15.0 lbs) One (1) year war	Item Description: On	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. Directivity Index (DI) = 8.308 (averaged 1kHz - 16kHz) Nominal Impedance - 7 ohms (THRU setting) Crossover Type - 2 nd order low-pass, 1st order high-pass, plus conjugate shaping Circuitry Transformer Taps - 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting; 70 nominal Recommended Protective High-Pass - 6 45 Hz high-pass (24 dB/oct) for 80 operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency - 198 mm (8 in), woven-fiberglass cone with pure butyl rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency - 23 mm (1 in) PEI diaphragm, low-viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating, Installation - InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) u-bracket. Secondary safety attachment loop point on back panel. Agency Rating - ROHS-compliant; Transformer UL Recognized per UL1476 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight - 6.8 kg (15.0 lbs) One (1) year warranty Designed metal housing with distinctive Aesthetic and ergonomic style Interchangeable capsule module with premium condenser Vioration and handling noises Built-in high-efficiency antenna		·	
exchange among AMCEN's customers, partners and stakeholders. Directivity index (DI) = 8.3dB (averaged 1kHz = 16kHz) Nominal Impedance = 7 ohms (THRU setting) Crossover Type = 2nd order low-pass, 1st order high- pass, plus conjugate shaping Circuitry Transformer Taps = 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting; 70 nominal Recommended Protective High-Pass = 6 45 Hz high- pass (24 dB/od) for 8Ω operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 55 Hz for 60W tap Transducers Low Frequency = 198 mm (8 in), woven-fiberglass cone with pure buty rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency = 23 mm (1 in) PEI diaphragm, low- viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating, MTC-28WMG-1 (&-WH) available with Weather-Max™ multi-layer foam and tight- weave mesh vapor barrier backling, Installation = InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) U-bracket. Secondary safety attachment loop point on back panel. Agency Rating = ROHS-compliant; Transformer UL Recognized per UL1876 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight — 6.8 kg (15.0 lbs) One (1) year warranty Designed metal housing with distinctive Aesthetic and ergonomic style Interchangeable capsule module with premium condenser value Handhald Bode Total State Provision and handling noises Built-in high-efficiency antenna			
Directivity Index (DI) = 8.3dB (averaged 1kHz = 16kHz) Nominal Impedance = 7 ohms (THRU setting) Crossover Type = 2nd order low-pass, 1st order high- pass, plus conjugate shaping Circuitry Transformer Taps = 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting; 7Ω nominal Recommended Protective High-Pass = 6 45 Hz high- pass (24 dB/oct) for 8Ω operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency = 198 mm (8 in), woven-fiberglass cone with pure butyl rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency = 23 mm (1 in) PEI diaphragm, low- viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material = High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille = Highly zince-plated, finished in durable TGIC polyester powder coating, MTC-28WMG-1 (8-WH) available with Weather-Max™ multi-layer foam dight- weave mesh vapor barrier backing, Installation = InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (8-WH) U-bracket. Secondary safety attachment loop point on back panel. Agency Rating = ROHS-compliant; Transformer UL Recognized per UL1876 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight = 6.18 Two (2) sets by the mounted on the sistence and ergonomic style Interchangeable capsule module with premium condenser Patented capsule suspension design virtually Eliminates vibration and handling noises Built-in high-efficiency antenna			
Nominal Impedance – 7 ohms (THRÜ setting) Crossover Type - 2nd order low-pass, 1st order highpass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting; 70 nominal Recommended Protective High-Pass – 6 45 Hz highpass (24 dB/oct) for 80 operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency – 198 mm (8 in), woven-fiberglass cone with pure butyl rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency – 23 mm (1 in) PEI diaphragm, low-viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating, MrC-28WMG-1 (8-WH) available with Weather-Max™ multi-layer foam and tightweave mesh vapor barrier backing, Installation - InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (8-WH) U-bracket, Secondary safety attachment loop point on back panel. Agency Rating - ROHS-compliant, Transformer UL Recognized per UL1878 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight – 6.8 kg (15.0 lbs) One (1) year warranty Designed metal housing with distinctive Aesthetic and ergonomic style Interchangeable capsule module with premium condenser Patented capsule suspension design virtually Eliminates vibration and handling noises Built-in high-efficiency antenna	exchange among AMC		
Crossover Type - 2nd order low-pass, 1st order highpass, plus conjugate shaping Circuitry Transformer Taps - 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting: 7Ω nominal Recommended Protective High-Pass - 6 45 Hz highpass (24 dB/oct) for 8Ω operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency - 198 mm (8 in), woven-fiberglass cone with pure butyl rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency - 23 mm (1 in) PEI diaphragm, low-viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating. MrC-28WMG-1 (8-WH) available with Weather-Max™ multi-layer foam and tight-weave mesh vapor barrier backing. Installation - InvisiBall wall-mounting system included. Two 6 mm attachment point on back panel. Agency Rating - ROHS-compilant; Transformer UL Recognized per UL1876 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight - 6.8 kg (15.0 lbs) One (1) year warranty Designed metal housing with distinctive Aesthetic and ergonomic style Interchangeable capsule module with premium condenser Patented capsule suspension design virtually Eliminates vibration and handling noisees Built-in high-efficiency antenna			
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voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille - Highly zinc-plated, finished in durable TGIC polyester powder coating. MTC-28WMG-1 (&-WH) available with Weather-Max™ multi-layer foam and tight- weave mesh vapor barrier backing. Installation - InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) U-bracket. Secondary safety attachment loop point on back panel. Agency Rating - ROHS-compliant; Transformer UL Recognized per UL1876 Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when mounted on InvisiBall wall-mount bracket; Net Weight - 6.8 kg (15.0 lbs) One (1) year warranty Designed metal housing with distinctive Aesthetic and ergonomic style Interchangeable capsule module with premium condenser Patented capsule suspension design virtually Eliminates vibration and handling noises Built-in high-efficiency antenna		High Frequency - 23 mm (1 in) PEI diaphragm, low-	
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Interchangeable capsule module with premium condenser Patented capsule suspension design virtually Eliminates vibration and handling noises Built-in high-efficiency antenna			
condenser Patented capsule suspension design virtually Eliminates vibration and handling noises Built-in high-efficiency antenna			
6.13 Two (2) sets Vibration and handling noises Built-in high-efficiency antenna		condenser	
Dual Handheld Built-in high-efficiency antenna			
	6.13 Two (2) sets		
I Rocklit I CD dieplaye all aparational parameter l	Dual Handheld		
Backlit LCD displays all operational parameter Information Informa	Microphone		
Provides precise and rapid frequency sync to the			
receiver			
Technical Specifications			
Frequency Range – UHF 478 – 931 MHz			
Bandwidth – 21 MHz			

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance		
setup and power system for a data center		
	y-to-day operation of delivery units and information	
exchange among AMCE	N's customers, partners and stakeholders. Oscillation Mode – PLL Synthesized	
	RF Output Power - 9 ~ 27mW (country dependent)	
	Deviation - < ± 40 kHz	
	Spurious Emissions < -53 dBc LCD Display - Group, Channel, Battery status & error	
	codes	
	Max. SPL – 135 dB SPL	
	Battery Type - 2 × AA alkaline Operating Time – Min. 12 hours (Low Power)	
	Current Consumption – Approx. 92 mA	
	Dimensions - $(\emptyset \times L)$ 51 \times 234 mm 2 \times 9.2 " Net Weight - Approx. 251 g 8.9 oz	
6.14 One (1) lot	1101 1101gm 7,pp.10x 20 1 g 0.10 02	
Speaker cable	(MID Male to MID Family 4.) 0.5	
transparent #16	(XLR Male to XLR Female 1m), 3.5mm stere plug-2 X RCA Plug (1.5m)	
AWG,	NOAT lug (1.3m)	
Interconnector		
7. PABX		
EQUIPMENT		
	Support Multi-site networking. SIP Networking for Low cost. Flexible expansion by adding activation key.	
	Support small to large communication system. Up to	
	maximum 992 (with DXDP 1152) Extensions.	
	Built-in support for Advanced IP extensions as well as	
7.1 One (1) set	standard SIP phones. Easy Migration to IP	
PBX Main Unit	SIP trunking Integrated SIP telephony via ITSPs* and other SIP trunk Providers.	
	It is a high intuitive PC Based application suit that blend	
	powerful point and click telephony.	
	Wireless Mobility Solutions.	
	Built-in and Optional Voice Mail Processing system. Reduced Total Cost of Ownership.	
7.2 Two (2) sets		
24-Port SLT	Physical Extension Cards with Caller ID and Message Lamp Card	
Extension Card	with Caller ID and Message Lamp Card	
7.3 One (1) set 8-		
port Digital	Physical Extension Cards	
Extension Card		
7.4 One (1) set	L-Type	
Power Supply unit 7.5 One (1) set		
Back-up battery	included	
Cable		
7.6 One (1) set 16-	16 channel digital signal processor card with one 4	
	<u>L</u>	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statemen	
etc.), Monitoring and Control System with provision for anti-static Complian	ce
setup and power system for a data center	
Purpose: To support day-to-day operation of delivery units and information	
exchange among AMCEN's customers, partners and stakeholders.	
ch VoIP DSP Card channel IP trunk SHGW4 activation key and one 8	
channel IP proprietary telephone IPPT8 activation key	
pre-installed	
Compliant with ITU-T G.729a and G.711 codec methods	
Mounts on IPCMPR card	
3-Line Backlight LCD Display; 24 Flexible CO Buttons	
Full Duplex Speakerphone; EHS Support	
Specifications:	
Main LCD Display (Lines/Characters) – 3/16	
LCD Backlight- Yes	
Flexible CO Keys – 24	
7.7 Three (3) sets Navigator Keys- Yes	
3-Line LCD Digital Soft Keys – 4	
I I (:all Log Incoming/C)utgoing (:alls- Yes / Yes	
Proprietary Speakerphone - Yes (Full Duplex)	
Telephone Headset Port – Yes	
Electric Hook Switch (EHS)*1 – Yes	
Dimensions (mm) *2 (Width × Depth × Height)	
High Position267×170×180Low	
Position267×187×155Weight (g)*31070ColorBlack,	
White	
1-line Graphical LCD with backlighting; 8 freely	
programmable function keys; Speaker Phone, handset	
and headset with full duplex; Available in black and	
white colour	
Specification:	
LCD Type - Graphic	
LCD Dots (W x H) 160 x 18	
LCD Line 1	
LCD Character 16	
LCD Backlight Yes (On/Automatic/Off) Headset Yes (2.5	
7.8 One (1) set 1- mm audio jack) Full Duplex	
Line Digital Electronics Hook Switch (EHS) No	
Speakerphone Yes (Full Duplex)	
Proprietary External Expansion 1 DXDP port	
Telephone Bluetooth (for Headset) No	
DXDP Yes	
XDP No	
Data Transmission Capability PBX to DPT: Cable fÓ0.5	
mm 500 m DPT to DPT: Cable fÓ0.5 mm 50 m	
Wall Mount Kit Yes (Option)	
Dimension (W x D x H mm) LOW: 205 x 160 x 170	
FF Keys 8	
Soft Keys No	
0-9, *, # Keys Yes	
Redial Key Yes	

tem Description: One	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
•	Control System with provision for anti-static Compliance
etup and power syste	
	y-to-day operation of delivery units and information
exchange among AMCE	N's customers, partners and stakeholders.
	Flash/Recall Key Yes
	Hold Key Yes
	SP-Phone Key Yes
	Auto Answer/Mute Key Yes
	Auto Dial/Store Key Yes
	Transfer Key Yes
	Intercom Key Yes
	Pause Key - Yes
	CONF Key - Yes
	FWD/DND Key No
	Message Key Yes
	Navigator Key No
	4-Directions Key Yes
	Cancel Key No
	LED Message/Ringer Lamp Yes (Green/Red) LED FF
	Keys Yes (Green/Red) LED Intercom Yes
	(Green) LED SP-Phone Yes
	(Red) LED Auto Answer/Mute Yes (Red) LED Auto
	Dial/Store Yes
	(Red) LED CONF No LED FWD/DND Yes (Red)
	Message/Ringing Lamp Yes
	OHCA Yes Bluetooth Headset Adapter No Auto Redial
	No Off-Hook Monitor Yes Handset/Headset Mic Mute
	Yes Speakerphone Mic Mute Yes
	Phone Directory Yes
	Feature Access No
	Outgoing Call Log Yes
	Incoming Call Log Yes
	Audio Codec Yes (G.711)
	USB Unit I/F No
	System Programming No
	Station Programming Yes*1
	Electric Volume Headset 6 levels
	Electric Volume Handset 6 levels
	Electric Volume Speakerphone 8 levels Electric Volume
	Ringer 4 + Off
	LCD Contrast 4 levels
	Tones/Music Ring Tone 8
	Tones/Music on Hold No (Tone)
	Footnote *1 To operate by PROGRAM Key or PAUSE
	Key
7.9 One (1) set 4-	
Ch IP Trunk	4-Channel H.323/SIP Gateway Activation Key
	Integrated Talanhana System
7.10 Twelve (12)	Integrated Telephone System
cate Dacia Cinala	
sets Basic Single Line Telephone	Choice of Five Colors: black, white, red, dark blue and grey; Wall Mountable; Last Number

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
etc.), Monitoring and setup and power system	Control System with provision for anti-static Compliance
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
	Redial; Timed Flash
	Electronic Volume Control; 3-Step Ringer
	Selector
	Switchable Tone/Pulse Settings
	Specifications:
	Dial Mode: Tone (DTMF)/pulse
	Redial: One-touch (32 digits)
	Flash: 600 ms
	Power Source: Telephone line
	Dimensions (H x W x D): 96 mm x 150 mm x
	200 mm
	Weight: 475 g
7.11 One (1) set	
AVR 1000W	included
7.12 Three (3) sets	
12V Battery	included
7.13 Five (5) sets	
Krone Terminal	included
7.14 Three (3) sets	
Amphenol Cable	included
with Head	Indiada
With Houd	
8. Supply and	
installation of IT	
equipment for the	
data center and	
other ICT	
equipment.	
Including	
(Refrigerant piping	
type M hard drawn	included
copper pipe) and	
ACCU to FCU	
electrical power	
supply (THHN	
Philflex) with PVC	
flexible conduit. 1"	
diameter PVC	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. condensate drain pipe including insulating usina 3/8" thick rubber insulation wrapped with polyethylene tape. Installation of FM200. installation of fire suppression control panel. programming and configuration. Installation of monitoring and control access system, configuration, testing and commissioning. PABX installation, tracing. termination, programming and testing. Tracing, termination and programming for HD visual communication system, projectors and audio system. **Testing** and commissioning of all equipment, miscellaneous and consumables and training of all the system and integration.

	le (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power syst	·
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
9. OTHER	
REQUIREMENTS	
	9.1 To ensure the quality of service, the
	contractor shall submit the following
	documents:
	Supplier must have at least five (5) years of experience in supply, delivery, installation, testing and
	in supply, delivery, installation, testing and commissioning of network equipment and structured
	cabling system / Data Center Solution.
	Supplier must have completed at least one (1) similar
	projects in supply, delivery, installation, testing and
	commissioning of network equipment and Data Center
	Solution.
	The supplier shall submit implementation time-line that
	reflects all the milestones in Gantt chart.
	Supervised by a Certified License Electronics and
	Communication Engineer.
	Supplier must have at least Three (3) Certified Data
	Center Professionals (CDCP) duly employed by the
	company for at least 5 years and above. Managed by a registered Project Manager (PM) and shall
	submit a certificate issued by the Project Management
	Institute (PMI).
	Contractors must have Philippine Contractors
	Accreditation Board (PCAB) licenses required by Republic
	Act 4566 to perform
	telecommunications/communications installations.
	The contractor shall be responsible for all required
	permits.
9.2 Maintenance /	One (1) year maintenance with quarterly preventive
Support	maintenance visit
9.3 Warranty	One (1) year parts and services
	One (1) year Workmanship
	Operations and Maintenance Training prior to the acceptance of the project. Including lectures and actual
9.4 Training	demonstration for at least 8 hours for minimum of ten
	(10) participants.
9.5 Delivery /	Project must be completed within 120 days upon receipt
Project Duration	of Notice to Proceed
9.6 Operations &	
Maintenance	Included
Manual (English)	
Mariaa (Erigiisii)	

- d) Section VIII. Bidding Forms on or before the deadline specified in the **ITB** Clauses 21 in two (2) separate sealed bid envelopes, and which shall be submitted simultaneously. The first shall contain the technical component of the bid, including the eligibility requirements under **ITB** Clause a), and the second shall contain the financial component of the bid. This shall also be observed for each lot in the case of lot procurement.
- e) Forms as mentioned in **ITB** Clause a) must be completed without any alterations to their format, and no substitute form shall be accepted. All blank spaces shall be filled in with the information requested.
- f) The Bidder shall prepare and submit an original of the first and second envelopes as described in **ITB** Clauses 12 and 13. In addition, the Bidder shall

- submit copies of the first and second envelopes. In the event of any discrepancy between the original and the copies, the original shall prevail.
- g) Each and every page of the Bid Form, including the Schedule of Prices, under Section VIII hereof, shall be signed by the duly authorized representative/s of the Bidder. Failure to do so shall be a ground for the rejection of the bid.
- h) Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Bidder.

20. Sealing and Marking of Bids

- a) Bidders shall enclose their original eligibility and technical documents described in **ITB** Clause 12 in one sealed envelope marked "ORIGINAL TECHNICAL COMPONENT", and the original of their financial component in another sealed envelope marked "ORIGINAL FINANCIAL COMPONENT", sealing them all in an outer envelope marked "ORIGINAL BID".
- b) Each copy of the first and second envelopes shall be similarly sealed duly marking the inner envelopes as "COPY NO. ___ TECHNICAL COMPONENT" and "COPY NO. ___ FINANCIAL COMPONENT" and the outer envelope as "COPY NO. ___ ", respectively. These envelopes containing the original and the copies shall then be enclosed in one single envelope.
- c) The original and the number of copies of the Bid as indicated in the <u>BDS</u> shall be typed or written in ink and shall be signed by the Bidder or its duly authorized representative/s.
- d) All envelopes shall:
 - (a) contain the name of the contract to be bid in capital letters;
 - (b) bear the name and address of the Bidder in capital letters;
 - (c) be addressed to the Procuring Entity's BAC in accordance with **ITB** Clause 1.a);
 - (d) bear the specific identification of this bidding process indicated in the **ITB** Clause 1.b); and
 - (e) bear a warning "DO NOT OPEN BEFORE..." the date and time for the opening of bids, in accordance with **ITB** Clause 21.
- e) Bid envelopes that are not properly sealed and marked, as required in the bidding documents, shall not be rejected, but the Bidder or its duly authorized representative shall acknowledge such condition of the bid as submitted. The BAC or the Procuring Entity shall assume no responsibility for the misplacement of the contents of the improperly sealed or marked bid, or for its premature opening.

D. Submission and Opening of Bids

21. Deadline for Submission of Bids

Bids must be received by the Procuring Entity's BAC at the address and on or before the date and time indicated in the **BDS**.

22. Late Bids

Any bid submitted after the deadline for submission and receipt of bids prescribed by the Procuring Entity, pursuant to **ITB** Clause 21, shall be declared "Late" and shall not be accepted by the Procuring Entity. The BAC shall record in the minutes of bid submission and opening, the Bidder's name, its representative and the time the late bid was submitted.

23. Modification and Withdrawal of Bids

- a) The Bidder may modify its bid after it has been submitted; provided that the modification is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The Bidder shall not be allowed to retrieve its original bid, but shall be allowed to submit another bid equally sealed and properly identified in accordance with ITB Clause 20, linked to its original bid marked as "TECHNICAL MODIFICATION" or "FINANCIAL MODIFICATION" and stamped "received" by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Bidder unopened.
- 23.2 A Bidder may, through a Letter of Withdrawal, withdraw its bid after it has been submitted, for valid and justifiable reason; provided that the Letter of Withdrawal is received by the Procuring Entity prior to the deadline prescribed for submission and receipt of bids. The Letter of Withdrawal must be executed by the duly authorized representative of the Bidder identified in the Omnibus Sworn Statement, a copy of which should be attached to the letter.
- c) Bids requested to be withdrawn in accordance with **ITB** Clause a) shall be returned unopened to the Bidders. A Bidder, who has acquired the bidding documents, may also express its intention not to participate in the bidding through a letter which should reach and be stamped by the BAC before the deadline for submission and receipt of bids. A Bidder that withdraws its bid shall not be permitted to submit another bid, directly or indirectly, for the same contract.
- d) No bid may be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Financial Bid Form. Withdrawal of a bid during this interval shall result in the forfeiture of the Bidder's bid security, pursuant to ITB Clause 18.e), and the imposition of administrative, civil and criminal sanctions as prescribed by RA 9184 and its IRR.

24. Opening and Preliminary Examination of Bids

- a) The BAC shall open the bids in public, immediately after the deadline for the submission and receipt of bids, as specified in the <u>BDS</u>. In case the Bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the Bids submitted and reschedule the opening of Bids on the next working day or at the soonest possible time through the issuance of a Notice of Postponement to be posted in the PhilGEPS website and the website of the Procuring Entity concerned.
- b) Unless otherwise specified in the <u>BDS</u>, the BAC shall open the first bid envelopes and determine each Bidder's compliance with the documents prescribed in **ITB** Clause 12, using a non-discretionary "pass/fail" criterion. If a Bidder submits the required document, it shall be rated "passed" for that particular requirement. In this regard, bids that fail to include any requirement or are incomplete or patently insufficient shall be considered as "failed". Otherwise, the BAC shall rate the said first bid envelope as "passed".
- C) Unless otherwise specified in the <u>BDS</u>, immediately after determining compliance with the requirements in the first envelope, the BAC shall forthwith open the second bid envelope of each remaining eligible bidder whose first bid envelope was rated "passed". The second envelope of each complying bidder shall be opened within the same day. In case one or more of the requirements in the second envelope of a particular bid is missing, incomplete or patently insufficient, and/or if the submitted total bid price exceeds the ABC unless otherwise provided in **ITB** Clause 13.b), the BAC shall rate the bid concerned as "failed". Only bids that are determined to contain all the bid requirements for both components shall be rated "passed" and shall immediately be considered for evaluation and comparison.
- d) Letters of Withdrawal shall be read out and recorded during bid opening, and the envelope containing the corresponding withdrawn bid shall be returned to the Bidder unopened.
- e) All members of the BAC who are present during bid opening shall initial every page of the original copies of all bids received and opened.
- f) In the case of an eligible foreign bidder as described in **ITB** Clause 5, the following Class "A" Documents may be substituted with the appropriate equivalent documents, if any, issued by the country of the foreign Bidder concerned, which shall likewise be uploaded and maintained in the PhilGEPS in accordance with Section 8.5.2 of the IRR:
 - (a) Registration certificate from the Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives;

- (b) Mayor's/Business permit issued by the local government where the principal place of business of the bidder is located; and
- (c) Audited Financial Statements showing, among others, the prospective bidder's total and current assets and liabilities stamped "received" by the Bureau of Internal Revenue or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two years from the date of bid submission.
- g) Each partner of a joint venture agreement shall likewise submit the requirements in **ITB** Clause 12.1(a)(i). Submission of documents required under **ITB** Clauses 12.1(a)(ii) to 12.1(a)(iii) by any of the joint venture partners constitutes compliance.
- h) The Procuring Entity shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price (per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.
- 24.8 The bidders or their duly authorized representatives may attend the opening of bids. The BAC shall ensure the integrity, security, and confidentiality of all submitted bids. The Abstract of Bids as read and the minutes of the bid opening shall be made available to the public upon written request and payment of a specified fee to recover cost of materials.
- 24.9 To ensure transparency and accurate representation of the bid submission, the BAC Secretariat shall notify in writing all bidders whose bids it has received through its PhilGEPS-registered physical address or official e-mail address. The notice shall be issued within seven (7) calendar days from the date of the bid opening.

E. Evaluation and Comparison of Bids

25. Process to be Confidential

- a) Members of the BAC, including its staff and personnel, as well as its Secretariat and TWG, are prohibited from making or accepting any kind of communication with any bidder regarding the evaluation of their bids until the issuance of the Notice of Award, unless otherwise allowed in the case of **ITB** Clause 26.
- b) Any effort by a bidder to influence the Procuring Entity in the Procuring Entity's decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the Bidder's bid.

26. Clarification of Bids

To assist in the evaluation, comparison, and post-qualification of the bids, the Procuring Entity may ask in writing any Bidder for a clarification of its bid. All

responses to requests for clarification shall be in writing. Any clarification submitted by a Bidder in respect to its bid and that is not in response to a request by the Procuring Entity shall not be considered.

27. Domestic Preference

- a) Unless otherwise stated in the <u>BDS</u>, the Procuring Entity will grant a margin of preference for the purpose of comparison of bids in accordance with the following:
 - (a) The preference shall be applied when the lowest Foreign Bid is lower than the lowest bid offered by a Domestic Bidder.
 - (b) For evaluation purposes, the lowest Foreign Bid shall be increased by fifteen percent (15%).
 - (c) In the event that the lowest bid offered by a Domestic Bidder does not exceed the lowest Foreign Bid as increased, then the Procuring Entity shall award the contract to the Domestic Bidder at the amount of the lowest Foreign Bid.
 - (d) If the Domestic Bidder refuses to accept the award of contract at the amount of the Foreign Bid within two (2) calendar days from receipt of written advice from the BAC, the Procuring Entity shall award to the bidder offering the Foreign Bid, subject to post-qualification and submission of all the documentary requirements under these Bidding Documents.
- b) A Bidder may be granted preference as a Domestic Bidder subject to the certification from the DTI that the Bidder is offering unmanufactured articles, materials or supplies of the growth or production of the Philippines, or manufactured articles, materials, or supplies manufactured or to be manufactured in the Philippines substantially from articles, materials, or supplies of the growth, production, or manufacture, as the case may be, of the Philippines.

28. Detailed Evaluation and Comparison of Bids

- a) The Procuring Entity will undertake the detailed evaluation and comparison of bids which have passed the opening and preliminary examination of bids, pursuant to **ITB** Clause 24, in order to determine the Lowest Calculated Bid.
- b) The Lowest Calculated Bid shall be determined in two steps:
 - (a) The detailed evaluation of the financial component of the bids, to establish the correct calculated prices of the bids; and
 - (b) The ranking of the total bid prices as so calculated from the lowest to the highest. The bid with the lowest price shall be identified as the Lowest Calculated Bid.

- c) The Procuring Entity's BAC shall immediately conduct a detailed evaluation of all bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the following in the evaluation of bids:
 - (a) Completeness of the bid. Unless the **BDS** allows partial bids, bids not addressing or providing all of the required items in the Schedule of Requirements including, where applicable, Schedule of Prices, shall be considered non-responsive and, thus, automatically disqualified. In this regard, where a required item is provided, but no price is indicated, the same shall be considered as non-responsive, but specifying a zero (0) or a dash (-) for the said item would mean that it is being offered for free to the Procuring Entity, except those required by law or regulations to be provided for; and
 - (b) <u>Arithmetical corrections.</u> Consider computational errors and omissions to enable proper comparison of all eligible bids. It may also consider bid modifications. Any adjustment shall be calculated in monetary terms to determine the calculated prices.
- d) Based on the detailed evaluation of bids, those that comply with the above-mentioned requirements shall be ranked in the ascending order of their total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, to identify the Lowest Calculated Bid. Total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, which exceed the ABC shall not be considered, unless otherwise indicated in the **BDS**.
- e) The Procuring Entity's evaluation of bids shall be based on the bid price quoted in the Bid Form, which includes the Schedule of Prices.
- f) Bids shall be evaluated on an equal footing to ensure fair competition. For this purpose, all bidders shall be required to include in their bids the cost of all taxes, such as, but not limited to, value added tax (VAT), income tax, local taxes, and other fiscal levies and duties which shall be itemized in the bid form and reflected in the detailed estimates. Such bids, including said taxes, shall be the basis for bid evaluation and comparison.
- g) If so indicated pursuant to **ITB** Clause 1.2, Bids are being invited for individual lots or for any combination thereof, provided that all Bids and combinations of Bids shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid prices quoted shall correspond to all items specified for each lot and to all quantities specified for each item of a lot. Bid Security as required by **ITB** Clause 18 shall be submitted for each contract (lot) separately. The basis for evaluation of lots is specified in BDS Clause 28.3.

29. Post-Qualification

a) The BAC shall determine to its satisfaction whether the Bidder that is evaluated as having submitted the Lowest Calculated Bid complies with and is

responsive to all the requirements and conditions specified in **ITB** Clauses 5, 12, and 13.

b) Within a non-extendible period of five (5) calendar days from receipt by the bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the bidder for award. Provided in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the bid security in accordance with Section 69 of the IRR of RA 9184.

- c) The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted pursuant to **ITB** Clauses 12 and 13, as well as other information as the Procuring Entity deems necessary and appropriate, using a non-discretionary "pass/fail" criterion, which shall be completed within a period of twelve (12) calendar days.
- d) If the BAC determines that the Bidder with the Lowest Calculated Bid passes all the criteria for post-qualification, it shall declare the said bid as the LCRB, and recommend to the HoPE the award of contract to the said Bidder at its submitted price or its calculated bid price, whichever is lower.
- e) A negative determination shall result in rejection of the Bidder's Bid, in which event the Procuring Entity shall proceed to the next Lowest Calculated Bid with a fresh period to make a similar determination of that Bidder's capabilities to perform satisfactorily. If the second Bidder, however, fails the post qualification, the procedure for post qualification shall be repeated for the Bidder with the next Lowest Calculated Bid, and so on until the LCRB is determined for recommendation for contract award.
- f) Within a period not exceeding fifteen (15) calendar days from the determination by the BAC of the LCRB and the recommendation to award the contract, the HoPE or his duly authorized representative shall approve or disapprove the said recommendation.
- g) In the event of disapproval, which shall be based on valid, reasonable, and justifiable grounds as provided for under Section 41 of the IRR of RA 9184, the HoPE shall notify the BAC and the Bidder in writing of such decision and the grounds for it. When applicable, the BAC shall conduct a post-qualification of the Bidder with the next Lowest Calculated Bid. A request for reconsideration may be filed by the bidder with the HoPE in accordance with Section 37.1.3 of the IRR of RA 9184.

30. Reservation Clause

a) Notwithstanding the eligibility or post-qualification of a Bidder, the Procuring Entity concerned reserves the right to review its qualifications at any stage of

the procurement process if it has reasonable grounds to believe that a misrepresentation has been made by the said Bidder, or that there has been a change in the Bidder's capability to undertake the project from the time it submitted its eligibility requirements. Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Bidder which will affect its capability to undertake the project so that it fails the preset eligibility or bid evaluation criteria, the Procuring Entity shall consider the said Bidder as ineligible and shall disqualify it from submitting a bid or from obtaining an award or contract.

- b) Based on the following grounds, the Procuring Entity reserves the right to reject any and all bids, declare a Failure of Bidding at any time prior to the contract award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:
 - (a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the Procuring Entity, or between the BAC and any of the Bidders, or if the collusion is between or among the bidders themselves, or between a Bidder and a third party, including any act which restricts, suppresses or nullifies or tends to restrict, suppress or nullify competition;
 - (b) If the Procuring Entity's BAC is found to have failed in following the prescribed bidding procedures; or
 - (c) For any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the GOP as follows:
 - (i) If the physical and economic conditions have significantly changed so as to render the project no longer economically, financially or technically feasible as determined by the HoPE;
 - (ii) If the project is no longer necessary as determined by the HoPE; and
 - (iii) If the source of funds for the project has been withheld or reduced through no fault of the Procuring Entity.
- c) In addition, the Procuring Entity may likewise declare a failure of bidding when:
 - (a) No bids are received;
 - (b) All prospective Bidders are declared ineligible;
 - (c) All bids fail to comply with all the bid requirements or fail postqualification; or

(d) The bidder with the LCRB refuses, without justifiable cause to accept the award of contract, and no award is made in accordance with Section 40 of the IRR of RA 9184.

F. Award of Contract

31. Contract Award

- a) Subject to **ITB** Clause 29, the HoPE or its duly authorized representative shall award the contract to the Bidder whose bid has been determined to be the LCRB.
- b) Prior to the expiration of the period of bid validity, the Procuring Entity shall notify the successful Bidder in writing that its bid has been accepted, through a Notice of Award duly received by the Bidder or its representative personally or sent by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Bidder with the LCRB and submitted personally or sent by registered mail or electronically to the Procuring Entity.
- c) Notwithstanding the issuance of the Notice of Award, award of contract shall be subject to the following conditions:
 - (a) Submission of the following documents within ten (10) calendar days from receipt of the Notice of Award:
 - (i) Valid JVA, if applicable; or
 - (ii) In the case of procurement by a Philippine Foreign Service Office or Post, the PhilGEPS Registration Number of the winning foreign Bidder;
 - (b) Posting of the performance security in accordance with **ITB** Clause 33;
 - (c) Signing of the contract as provided in **ITB** Clause 32; and
 - (d) Approval by higher authority, if required, as provided in Section 37.3 of the IRR of RA 9184.
- d) At the time of contract award, the Procuring Entity shall not increase or decrease the quantity of goods originally specified in Section VI. Schedule of Requirements.

32. Signing of the Contract

a) At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Contract Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.

- b) Within ten (10) calendar days from receipt of the Notice of Award, the successful Bidder shall post the required performance security, sign and date the contract and return it to the Procuring Entity.
- c) The Procuring Entity shall enter into contract with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- d) The following documents shall form part of the contract:
 - (a) Contract Agreement;
 - (b) Bidding Documents;
 - (c) Winning bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.*, bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
 - (d) Performance Security;
 - (e) Notice of Award of Contract; and
 - (f) Other contract documents that may be required by existing laws and/or specified in the **BDS**.

33. Performance Security

- a) To guarantee the faithful performance by the winning Bidder of its obligations under the contract, it shall post a performance security within a maximum period of ten (10) calendar days from the receipt of the Notice of Award from the Procuring Entity and in no case later than the signing of the contract.
- b) The Performance Security shall be denominated in Philippine Pesos and posted in favor of the Procuring Entity in an amount not less than the percentage of the total contract price in accordance with the following schedule:

Form of Performance Security	Amount of Performance Security (Not less than the Percentage of the Total Contract Price)
(a) Cash or cashier's/manager's check issued by a Universal or Commercial Bank. For biddings conducted by the LGUs, the Cashier's/Manager's Check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.	Five percent (5%)

(b) Bank draft/guarantee or irrevocable letter of credit issued by a Universal or Commercial Bank: Provided, however, that it shall be confirmed or authenticated by a Universal or Commercial Bank, if issued by a foreign bank. For biddings conducted by the LGUs, the Bank Draft/Guarantee or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such	
, and the second	
(c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Thirty percent (30%)

c) Failure of the successful Bidder to comply with the above-mentioned requirement shall constitute sufficient ground for the annulment of the award and forfeiture of the bid security, in which event the Procuring Entity shall have a fresh period to initiate and complete the post qualification of the second Lowest Calculated Bid. The procedure shall be repeated until the LCRB is identified and selected for recommendation of contract award. However if no Bidder passed post-qualification, the BAC shall declare the bidding a failure and conduct a re-bidding with re-advertisement, if necessary.

34. Notice to Proceed

Within seven (7) calendar days from the date of approval of the contract by the appropriate government approving authority, the Procuring Entity shall issue the Notice to Proceed (NTP) together with a copy or copies of the approved contract to the successful Bidder. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Bidder.

35. Protest Mechanism

Decisions of the procuring entity at any stage of the procurement process may be questioned in accordance with Section 55 of the IRR of RA 9184.

Section III. Bid Data Sheet

Bid Data Sheet

TED OI	
ITB Clause	
1.a)	The Procuring Entity is <i>Metals Industry Research and Development Center</i> .
	The name of the Contract is Procurement of One (1) Lot IT System (Server , Switch , LAN , WAN , etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center
	The identification number of the Contract is PR No. 19111153
1.b)	The lot(s) and reference is/are: PR No. 19111153
	Procurement of One (1) Lot IT System (Server, Switch, LAN, WAN, etc.), Monitoring and Control System with provision for anti-static setup and power system for a data center
2	The Funding Source is:
	The Government of the Philippines (GOP) through FY 2019 Grant-in-Aid Project (Machinery and Equipment Outlay) in the amount of Five Million Five Hundred Thousand Pesos (Php5,500,000.00).
	The name of the Project is: "Research on Advanced Prototyping for Product Innovation and Development Using Additive Manufacturing Technologies (RAPPID-ADMATEC)"
3.a)	No further instructions.
5.a)	No further instructions.
5.b)	Foreign bidders, except those falling under ITB Clause 5.b)(b), may not participate in this Project.
5.d)	The Bidder must have completed, within the period specified in the Invitation to Bid and ITB Clause 12.1(a)(ii), a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
	For this purpose, similar contracts shall refer to supply, delivery, installation, testing and commissioning of network equipment and Data Center Solution
7	No further instructions.
a)	Subcontracting is not allowed.
b)	Not applicable.
9.a)	The Procuring Entity will hold a Pre bid Conference for this Project at 9:00 A.M. on Nov.22 22,2019 at Mercury Conference Room, Third Floor, Gold Building, MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City.

10.a)	The Procuring Entity's address is:
	Ms. Mercedita G. Abutal
	BAC Chairperson
	Metals Industry Research and Development Center
	MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City
	Tel. No. 837-0431 local 442 and 444
	bac@mirdc.dost.gov.ph
	Fax No. 837-0430
a)(a)	No further instructions.
12.1(a)(ii)	The bidder's SLCC similar to the contract to be bid should have been completed within <i>five</i> (5) <i>years</i> prior to the deadline for the submission and receipt of bids.
13.a)	List any additional requirements or state "No additional requirements."
13.a)(b)	No further instructions.
13.1(c)	List any additional required document(s) or state "No additional requirements."
13.b)	The ABC is <i>Five Million Five Hundred Thousand Pesos (Php5,500,000.00)</i> . Any bid with a financial component exceeding this amount shall not be accepted.
15.4(a)(iv)	No incidental services are required.
15.d)(b)	No incidental services are required.
16.a)(b)	The Bid prices for Goods supplied from outside of the Philippines shall be quoted either in Philippine Pesos or United States Dollars at the discretion of the Bidder.
16.3	Payment shall be made in <i>Philippine Pesos</i> .
17.a)	Bids will be valid until 120 days.
18.a)	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:
	1. The amount of not less than 2% of ABC], if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or
	2. The amount of not less than 5% of ABC] if bid security is in Surety Bond.
18.b)	The bid security shall be valid until 120 days.

	Supplier must have at least Three (3) Certified Data Center Professionals
	Supervised by a Certified License Electronics and Communication Engineer.
	To ensure the quality of service, the contractor shall submit the following documents:
29.2	List licenses and permits relevant to the Project and the corresponding law requiring it, or state.
28.d)	No further instructions.
	Partial bid is not allowed. The goods are grouped in a single lot and the lot shall not be divided into sub-lots for the purpose of bidding, evaluation, and contract award.
	Select one of the following paragraphs, delete the other.
	Option 3 - Similar items, to be grouped together to form several lots that shall be evaluated and awarded as separate contracts.
	Option 2 - All items to be grouped together to form one complete Lot that will be awarded to one Bidder to form one complete contract.
	Option 1 – Each item to be evaluated and compared with other Bids separately and recommended for contract award separately.
	Lots should be formed of similar items that are likely to attract the maximum competition. A lot is the quantity and number of items that will be included in a single contract. For example:
28.c) (a)	Grouping and Evaluation of Lots –
27.a)	No further instructions.
24.3	No further instructions.
24.2	No further instructions.
	The date and time of bid opening is Dec. 11, 2019 at 9:00 A.M.
24.a)	The place of bid opening is Mercury Conference Room, 3 rd Floor, Gold Building, MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City.
	The deadline for submission of bids is Dec.11, 2019 at 9:00 A.M.
21	The address for submission of bids is <i>Mercury Conference Room</i> , 3 rd Floor, Gold Building, MIRDC Compound, Gen. Santos Ave., Bicutan, Taguig City.
20.c)	Each Bidder shall submit <i>one</i> (1) original and <i>three</i> (3) copies of the first and second components of its bid.

	(CDCP) duly employed by the company for at least 5 years and above. Managed by a registered Project Manager (PM) and shall submit a certificate issued by the Project Management Institute (PMI). Contractors must have Philippine Contractors Accreditation Board (PCAB) licenses required by Republic Act 4566 to perform telecommunications/communications installations. The contractor shall be responsible for all required permits.
32.d)(f)	List additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity, or state.

Section IV. General Conditions of Contract

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1. **Definitions**

- a) In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Procuring Entity and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
 - (c) "The Goods" means all of the supplies, equipment, machinery, spare parts, other materials and/or general support services which the Supplier is required to provide to the Procuring Entity under the Contract.
 - (d) "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
 - (e) "GCC" means the General Conditions of Contract contained in this Section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Procuring Entity" means the organization purchasing the Goods, as named in the <u>SCC</u>.
 - (h) "The Procuring Entity's country" is the Philippines.
 - (i) "The Supplier" means the individual contractor, manufacturer distributor, or firm supplying/manufacturing the Goods and Services under this Contract and named in the <u>SCC</u>.
 - (j) The "Funding Source" means the organization named in the <u>SCC</u>.
 - (k) "The Project Site," where applicable, means the place or places named in the **SCC**.
 - (l) "Day" means calendar day.
 - (m) The "Effective Date" of the contract will be the date of signing the contract, however the Supplier shall commence performance of its obligations only upon receipt of the Notice to Proceed and copy of the approved contract.

(n) "Verified Report" refers to the report submitted by the Implementing Unit to the HoPE setting forth its findings as to the existence of grounds or causes for termination and explicitly stating its recommendation for the issuance of a Notice to Terminate.

2. Corrupt, Fraudulent, Collusive, and Coercive Practices

- a) Unless otherwise provided in the <u>SCC</u>, the Procuring Entity as well as the bidders, contractors, or suppliers shall observe the highest standard of ethics during the procurement and execution of this Contract. In pursuance of this policy, the Procuring Entity:
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means behavior on the part of officials in the public or private sectors by which they improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and it includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the Government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in Republic Act 3019.
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring Entity, and includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, noncompetitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
 - (iii) "collusive practices" means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.
 - (iv) "coercive practices" means harming or threatening to harm, directly or indirectly, persons, or their property to influence their participation in a procurement process, or affect the execution of a contract;
 - (v) "obstructive practice" is
 - (aa) deliberately destroying, falsifying, altering or concealing of evidence material to an administrative proceedings or investigation or making false statements to investigators in order to materially impede an

administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or

- (bb) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has engaged in any of the practices mentioned in this Clause for purposes of competing for the contract.
- b) Further the Funding Source, Borrower or Procuring Entity, as appropriate, will seek to impose the maximum civil, administrative and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with any of the practices mentioned in **GCC** Clause a)(a).

3. Inspection and Audit by the Funding Source

The Supplier shall permit the Funding Source to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Funding Source, if so required by the Funding Source.

4. Governing Law and Language

- a) This Contract shall be interpreted in accordance with the laws of the Republic of the Philippines.
- b) This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All correspondence and other documents pertaining to this Contract exchanged by the parties shall be written in English.

5. Notices

a) Any notice, request, or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request, or consent shall be deemed to have been given or made when received by the concerned party, either in person or through an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram, or facsimile to such Party at the address specified in the

- <u>SCC</u>, which shall be effective when delivered and duly received or on the notice's effective date, whichever is later.
- b) A Party may change its address for notice hereunder by giving the other Party notice of such change pursuant to the provisions listed in the **SCC** for **GCC** Clause a).

6. Scope of Contract

- a) The Goods and Related Services to be provided shall be as specified in Section VI. Schedule of Requirements.
- b) This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. Any additional requirements for the completion of this Contract shall be provided in the <u>SCC</u>.

7. Subcontracting

- a) Subcontracting of any portion of the Goods, if allowed in the **BDS**, does not relieve the Supplier of any liability or obligation under this Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants or workmen.
- b) If subcontracting is allowed, the Supplier may identify its subcontractor during contract implementation. Subcontractors disclosed and identified during the bidding may be changed during the implementation of this Contract. In either case, subcontractors must submit the documentary requirements under ITB Clause 12 and comply with the eligibility criteria specified in the BDS. In the event that any subcontractor is found by the Procuring Entity to be ineligible, the subcontracting of such portion of the Goods shall be disallowed.

8. Procuring Entity's Responsibilities

- a) Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals, import, and other licenses from local public authorities, the Procuring Entity shall, if so needed by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner.
- b) The Procuring Entity shall pay all costs involved in the performance of its responsibilities in accordance with GCC Clause 6.

9. Prices

a) For the given scope of work in this Contract as awarded, all bid prices are considered fixed prices, and therefore not subject to price escalation during contract implementation, except under extraordinary circumstances and upon

- prior approval of the GPPB in accordance with Section 61 of R.A. 9184 and its IRR or except as provided in this Clause.
- b) Prices charged by the Supplier for Goods delivered and/or services performed under this Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any change in price resulting from a Change Order issued in accordance with GCC Clause 29.

10. Payment

- a) Payments shall be made only upon a certification by the HoPE to the effect that the Goods have been rendered or delivered in accordance with the terms of this Contract and have been duly inspected and accepted. Except with the prior approval of the President no payment shall be made for services not yet rendered or for supplies and materials not yet delivered under this Contract. Ten percent (10%) of the amount of each payment shall be retained by the Procuring Entity to cover the Supplier's warranty obligations under this Contract as described in GCC Clause 17.
- b) The Supplier's request(s) for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and/or Services performed, and by documents submitted pursuant to the SCC provision for GCC Clause 6.b), and upon fulfillment of other obligations stipulated in this Contract.
- c) Pursuant to GCC Clause b), payments shall be made promptly by the Procuring Entity, but in no case later than sixty (60) days after submission of an invoice or claim by the Supplier. Payments shall be in accordance with the schedule stated in the SCC.
- d) Unless otherwise provided in the <u>SCC</u>, the currency in which payment is made to the Supplier under this Contract shall be in Philippine Pesos.
- e) Unless otherwise provided in the <u>SCC</u>, payments using Letter of Credit (LC), in accordance with the Guidelines issued by the GPPB, is allowed. For this purpose, the amount of provisional sum is indicated in the <u>SCC</u>. All charges for the opening of the LC and/or incidental expenses thereto shall be for the account of the Supplier.

11. Advance Payment and Terms of Payment

- a) Advance payment shall be made only after prior approval of the President, and shall not exceed fifteen percent (15%) of the Contract amount, unless otherwise directed by the President or in cases allowed under Annex "D" of RA 9184.
- b) All progress payments shall first be charged against the advance payment until the latter has been fully exhausted.
- c) For Goods supplied from abroad, unless otherwise indicated in the <u>SCC</u>, the terms of payment shall be as follows:

- (a) On Contract Signature: Fifteen Percent (15%) of the Contract Price shall be paid within sixty (60) days from signing of the Contract and upon submission of a claim and a bank guarantee for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII. Bidding Forms.
- (b) On Delivery: Sixty-five percent (65%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the <u>SCC</u> provision on Delivery and Documents.
- (c) On Acceptance: The remaining twenty percent (20%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no inspection or acceptance certificate is issued by the Procuring Entity's authorized representative within forty five (45) days of the date shown on the delivery receipt, the Supplier shall have the right to claim payment of the remaining twenty percent (20%) subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the <u>SCC</u> provision on Delivery and Documents.

12. Taxes and Duties

The Supplier, whether local or foreign, shall be entirely responsible for all the necessary taxes, stamp duties, license fees, and other such levies imposed for the completion of this Contract.

13. Performance Security

- a) Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any the forms prescribed in the **ITB** Clause 33.b).
- b) The performance security posted in favor of the Procuring Entity shall be forfeited in the event it is established that the winning bidder is in default in any of its obligations under the contract.
- c) The performance security shall remain valid until issuance by the Procuring Entity of the Certificate of Final Acceptance.
- d) The performance security may be released by the Procuring Entity and returned to the Supplier after the issuance of the Certificate of Final Acceptance subject to the following conditions:
 - (a) There are no pending claims against the Supplier or the surety company filed by the Procuring Entity;

- (b) The Supplier has no pending claims for labor and materials filed against it; and
- (c) Other terms specified in the **SCC**.
- e) In case of a reduction of the contract value, the Procuring Entity shall allow a proportional reduction in the original performance security, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.

14. Use of Contract Documents and Information

- a) The Supplier shall not, except for purposes of performing the obligations in this Contract, without the Procuring Entity's prior written consent, disclose this Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
- b) Any document, other than this Contract itself, enumerated in GCC Clause a) shall remain the property of the Procuring Entity and shall be returned (all copies) to the Procuring Entity on completion of the Supplier's performance under this Contract if so required by the Procuring Entity.

15. Standards

The Goods provided under this Contract shall conform to the standards mentioned in the **Error! Reference source not found.**; and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the institution concerned.

16. Inspection and Tests

- a) The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Entity. The <u>SCC</u> and <u>Error!</u> Reference source not found. shall specify what inspections and/or tests the Procuring Entity requires and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- b) If applicable, the inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Entity. The Supplier shall provide the Procuring Entity with results of such inspections and tests.

- c) The Procuring Entity or its designated representative shall be entitled to attend the tests and/or inspections referred to in this Clause provided that the Procuring Entity shall bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
- d) The Procuring Entity may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity, and shall repeat the test and/or inspection, at no cost to the Procuring Entity, upon giving a notice pursuant to GCC Clause 5.
- e) The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Procuring Entity or its representative, shall release the Supplier from any warranties or other obligations under this Contract.

17. Warranty

- a) The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials, except when the technical specifications required by the Procuring Entity provides otherwise.
- b) The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.
- C) In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier for a minimum period specified in the <u>SCC</u>. The obligation for the warranty shall be covered by, at the Supplier's option, either retention money in an amount equivalent to at least one percent (1%) of every progress payment, or a special bank guarantee equivalent to at least one percent (1%) of the total Contract Price or other such amount if so specified in the <u>SCC</u>. The said amounts shall only be released after the lapse of the warranty period specified in the <u>SCC</u>; provided, however, that the Supplies delivered are free from patent and latent defects and all the conditions imposed under this Contract have been fully met.
- d) The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, within the period specified in the <u>SCC</u> and with all reasonable speed, repair or replace the defective Goods or parts thereof, without cost to the Procuring Entity.
- e) If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in **GCC** Clause d), the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense

and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract and under the applicable law.

18. Delays in the Supplier's Performance

- a) Delivery of the Goods and/or performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Entity in Section VI. Schedule of Requirements.
- b) If at any time during the performance of this Contract, the Supplier or its Subcontractor(s) should encounter conditions impeding timely delivery of the Goods and/or performance of Services, the Supplier shall promptly notify the Procuring Entity in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, and upon causes provided for under GCC Clause 22, the Procuring Entity shall evaluate the situation and may extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of Contract.
- c) Except as provided under GCC Clause 22, a delay by the Supplier in the performance of its obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 19, unless an extension of time is agreed upon pursuant to GCC Clause 29 without the application of liquidated damages.

19. Liquidated Damages

Subject to GCC Clauses 18 and 22, if the Supplier fails to satisfactorily deliver any or all of the Goods and/or to perform the Services within the period(s) specified in this Contract inclusive of duly granted time extensions if any, the Procuring Entity shall, without prejudice to its other remedies under this Contract and under the applicable law, deduct from the Contract Price, as liquidated damages, the applicable rate of one tenth (1/10) of one (1) percent of the cost of the unperformed portion for every day of delay until actual delivery or performance. The maximum deduction shall be ten percent (10%) of the amount of contract. Once the maximum is reached, the Procuring Entity may rescind or terminate the Contract pursuant to GCC Clause 23, without prejudice to other courses of action and remedies open to it.

20. Settlement of Disputes

- a) If any dispute or difference of any kind whatsoever shall arise between the Procuring Entity and the Supplier in connection with or arising out of this Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- b) If after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Procuring Entity or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.

- c) Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under this Contract.
- d) In the case of a dispute between the Procuring Entity and the Supplier, the dispute shall be resolved in accordance with Republic Act 9285 ("R.A. 9285"), otherwise known as the "Alternative Dispute Resolution Act of 2004."
- e) Notwithstanding any reference to arbitration herein, the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and the Procuring Entity shall pay the Supplier any monies due the Supplier.

21. Liability of the Supplier

- a) The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines, subject to additional provisions, if any, set forth in the **SCC**.
- b) Except in cases of criminal negligence or willful misconduct, and in the case of infringement of patent rights, if applicable, the aggregate liability of the Supplier to the Procuring Entity shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

22. Force Majeure

- a) The Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that the Supplier's delay in performance or other failure to perform its obligations under the Contract is the result of a *force majeure*.
- b) For purposes of this Contract the terms "force majeure" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or force majeure shall be interpreted to mean an event which the Supplier could not have foreseen, or which though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions; and any other cause the effects of which could have been avoided with the exercise of reasonable diligence by the Supplier. Such events may include, but not limited to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- c) If a *force majeure* situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the *force majeure*.

23. Termination for Default

- 23.1 The Procuring Entity may rescind or terminate a contract for default, without prejudice to other courses of action and remedies available under the circumstances when, outside force majeure, the Supplier fails to deliver or perform any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Procuring Entity pursuant to a request made by the Supplier prior to the delay, and such failure amounts to at least ten percent (10%) of the contract price;
- 23.2 The Procuring Entity may terminate the contract when, as a result of force majeure, the Supplier is unable to deliver or perform any or all of the Goods, amounting to at least ten percent (10%) of the contract price, for a period of not less than sixty (60) calendar days after receipt of the notice from the Procuring Entity stating that the circumstance of force majeure is deemed to have ceased;
- 23.3 The Procuring Entity shall terminate the contract when the Supplier fails to perform any other obligations under the Contract.
- 23.4 In the event the Procuring Entity terminates this Contract in whole or in part for any of the reasons provided under GCC Clause 23 to 26, the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring Entity for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of this Contract to the extent not terminated.
- 23.5 In case the delay in the delivery of the Goods and/or performance of the Services exceeds a time duration equivalent to ten percent (10%) of the specified contract time plus any time extension duly granted to the Supplier, the Procuring Entity may terminate this Contract, forfeit the Supplier's performance security and award the same to a qualified Supplier.

24. Termination for Insolvency

The Procuring Entity shall terminate this Contract if the Supplier is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Entity and/or the Supplier.

25. Termination for Convenience

- a) The Procuring Entity may terminate this Contract, in whole or in part, at any time for its convenience. The HoPE may terminate a contract for the convenience of the Government if he has determined the existence of conditions that make Project Implementation economically, financially or technically impractical and/or unnecessary, such as, but not limited to, fortuitous event(s) or changes in law and national government policies.
- b) The Goods that have been delivered and/or performed or are ready for delivery or performance within thirty (30) calendar days after the Supplier's receipt of

Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices. For Goods not yet performed and/or ready for delivery, the Procuring Entity may elect:

- (a) to have any portion delivered and/or performed and paid at the contract terms and prices; and/or
- (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.
- c) If the Supplier suffers loss in its initial performance of the terminated contract, such as purchase of raw materials for goods specially manufactured for the Procuring Entity which cannot be sold in open market, it shall be allowed to recover partially from this Contract, on a *quantum meruit* basis. Before recovery may be made, the fact of loss must be established under oath by the Supplier to the satisfaction of the Procuring Entity before recovery may be made.

26. Termination for Unlawful Acts

- a) The Procuring Entity may terminate this Contract in case it is determined *prima facie* that the Supplier has engaged, before or during the implementation of this Contract, in unlawful deeds and behaviors relative to contract acquisition and implementation. Unlawful acts include, but are not limited to, the following:
 - (a) Corrupt, fraudulent, and coercive practices as defined in **ITB** Clause 3.a)(a);
 - (b) Drawing up or using forged documents;
 - (c) Using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and
 - (d) Any other act analogous to the foregoing.

27. Procedures for Termination of Contracts

- a) The following provisions shall govern the procedures for termination of this Contract:
 - (a) Upon receipt of a written report of acts or causes which may constitute ground(s) for termination as aforementioned, or upon its own initiative, the Implementing Unit shall, within a period of seven (7) calendar days, verify the existence of such ground(s) and cause the execution of a Verified Report, with all relevant evidence attached;
 - (b) Upon recommendation by the Implementing Unit, the HoPE shall terminate this Contract only by a written notice to the Supplier conveying the termination of this Contract. The notice shall state:

- (i) that this Contract is being terminated for any of the ground(s) afore-mentioned, and a statement of the acts that constitute the ground(s) constituting the same;
- (ii) the extent of termination, whether in whole or in part;
- (iii) an instruction to the Supplier to show cause as to why this Contract should not be terminated; and
- (iv) special instructions of the Procuring Entity, if any.
- (c) The Notice to Terminate shall be accompanied by a copy of the Verified Report;
- (d) Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Supplier shall submit to the HoPE a verified position paper stating why this Contract should not be terminated. If the Supplier fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the HoPE shall issue an order terminating this Contract;
- (e) The Procuring Entity may, at any time before receipt of the Supplier's verified position paper described in item (d) above withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Supplier's receipt of the notice;
- (f) Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the HoPE shall decide whether or not to terminate this Contract. It shall serve a written notice to the Supplier of its decision and, unless otherwise provided, this Contract is deemed terminated from receipt of the Supplier of the notice of decision. The termination shall only be based on the ground(s) stated in the Notice to Terminate;
- (g) The HoPE may create a Contract Termination Review Committee (CTRC) to assist him in the discharge of this function. All decisions recommended by the CTRC shall be subject to the approval of the HoPE; and
- (h) The Supplier must serve a written notice to the Procuring Entity of its intention to terminate the contract at least thirty (30) calendar days before its intended termination. The Contract is deemed terminated if it is not resumed in thirty (30) calendar days after the receipt of such notice by the Procuring Entity.

28. Assignment of Rights

The Supplier shall not assign his rights or obligations under this Contract, in whole or in part, except with the Procuring Entity's prior written consent.

29. Contract Amendment

Subject to applicable laws, no variation in or modification of the terms of this Contract shall be made except by written amendment signed by the parties.

30. Application

These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of this Contract.

Section V. Special Conditions of Contract

Special Conditions of Contract

GCC Clause	
1.a)(g)	The Procuring Entity is Metals Industry Research and Development Center.
1.a)(i)	The Supplier is
1.a)(j)	The Funding Source is
	The Government of the Philippines (GOP) through FY 2019 Grant-in-Aid Project (Machinery and Equipment Outlay) in the amount of Five Million Five Hundred Thousand Pesos (Php5,500,000.00).
	The name of the Project is: "Research on Advanced Prototyping for Product Innovation and Development Using Additive Manufacturing Technologies (RAPPID-ADMATEC)"
1.a)(k)	The Project Site is Metals Industry Research and Development Center (MIRDC).
2.1	No further instructions.
5.a)	The Procuring Entity's address for Notices is: <i>Metals Industry Research and Development Center, Gen. Santos Avenue, Bicutan Taguig City, Mary Grace Opon/Kristine Gealan, Tel. No.</i> +632 837-0431 to 38, loc. 443/464, Fax. No. +632 837-0430.
	The Supplier's address for Notices is:
6.b)	List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:
	Delivery and Documents –
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:
	For Goods Supplied from Abroad, state "The delivery terms applicable to the Contract are DDP delivered [insert place of destination]. In accordance with INCOTERMS."
	For Goods Supplied from Within the Philippines, state "The delivery terms applicable to this Contract are delivered [insert place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements.

The details of shipping and/or other documents to be furnished by the Supplier are as follows: For Goods supplied from within the Philippines:

Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents to the Procuring Entity:

- (i) Original and four copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
- (ii) Original and four copies delivery receipt/note, railway receipt, or truck receipt;
- (iii) Original Supplier's factory inspection report;
- (iv) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate;
- (v) Original and four copies of the certificate of origin (for imported Goods);
- (vi) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;
- (vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site; and
- (viii) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.

For Goods supplied from abroad:

Upon shipment, the Supplier shall notify the Procuring Entity and the insurance company by cable the full details of the shipment, including Contract Number, description of the Goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following documents as applicable with the documentary requirements of any letter of credit issued taking precedence:

- (i) Original and four copies of the Supplier's invoice showing Goods' description, quantity, unit price, and total amount;
- (ii) Original and four copies of the negotiable, clean shipped on board bill of lading marked "freight pre-paid" and five copies of the non-negotiable bill of lading;
- (iii) Original Supplier's factory inspection report;
- (iv) Original and four copies of the Manufacturer's and/or Supplier's warranty certificate;
- (v) Original and four copies of the certificate of origin (for imported Goods):
- (vi) Delivery receipt detailing number and description of items received signed by the Procuring Entity's representative at the Project Site;
- (vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site; and

(viii) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.

For purposes of this Clause the Procuring Entity's Representative at the Project Site is [insert name(s)].

Incidental Services -

The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:

Select appropriate requirements and delete the rest.

- (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
- (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
- (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
- (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
- (e) training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

Spare Parts -

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

Select appropriate requirements and delete the rest.

- (a) such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- (b) in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
 - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and

specifications of the spare parts, if requested.

The spare parts required are listed in Section VI. Schedule of Requirements and the cost thereof are included in the Contract Price

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the Goods for a period of [insert here the time period specified. If not used insert time period of three times the warranty period].

Other spare parts and components shall be supplied as promptly as possible, but in any case within [insert appropriate time period] months of placing the order.

Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the GOODS' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity

Name of the Supplier

Contract Description

Final Destination

Gross weight

Any special lifting instructions

Any special handling instructions

Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

Insurance -

The Goods supplied under this Contract shall be fully insured by the Supplier in a freely convertible currency against loss or damage incidental to

manufacture or acquisition, transportation, storage, and delivery. Goods remain at the risk and title of the Supplier until their final acceptance by the Procuring Entity. Transportation – Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price. Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure in accordance with GCC Clause 22. The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP Deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination. Patent Rights -The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof. 10.4 Payment shall be made in *Philippine Pesos*. 10.5 Payment using LC is not allowed. 11.3 The terms of payment shall be 15 days after final certificate of acceptance was issued. 13.d)(c)Specify additional conditions, if any, that must be met prior to the release of the performance security, otherwise, state "No further instructions".

16.a)	The inspections and tests that will be conducted are:	
	One (1) year maintenance with quarterly preventive maintenance visit	
17.c)	One (1) year after acceptance by the Procuring Entity of the delivered Goods.	
17.d)	The period for correction of defects in the warranty period is:	
	Maintenance / Support	
	One (1) year maintenance with quarterly preventive maintenance visit	
	Warranty	
	One (1) year parts and services	
	One (1) year Workmanship	
21.a)	State here "No additional provision." or, if the Supplier is a joint	
	venture, "All partners to the joint venture shall be jointly and severally liable to the Procuring Entity."	

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months

Technical Specifications

Item	Specifications and Requirements	Statement of Compliance
		Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.a)(a)(ii) and/or GCC Clause 2.a)(a)(ii).

Itam Description	a (4) Lat IT Custom (Comran Custola LAN WAN Otatawant of
	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance em for a data center
	ay-to-day operation of delivery units and information
	EN's customers, partners and stakeholders.
Item Name:	Detailed Specifications:
1. COOLING	
SYSTEM	
1.1 Two (2) units Air Conditioner	2.0HP Single split inverter type wall mounted 220 V 1PH atleast 57 hZ, with wireless remote Cooling Capacity – 16,557 (2,983-17,500) Power Consumption – 1,487 (227-1,718) Energy Efficient / EER – 10.3 (12.5-9.9) Sound Level@ Low – at least 45/35.3/ 23.7 Voltage,Frequency, Phase- 230-59-1 Ozone Friendly Refrigerant: Type- R410-A Physical Data (Indoor Net Dimension) W X H X D- 793 X 287 X 225 Physical Data (Outdoor Net Dimension) W X H X D – 777 X 545 X 287 Pipe Sizes (Liquid / Gas) – \$\phi 6.35 / \phi 12.7 Maximum Pipe Length – at least 18.5 One year warranty
2. DATA CENTER, POWER SYSTEM, MONITORING AND CONTROL SYSTEM	
2.1 One (lot) monitoring and control system with provision for anti-static setup and power system for a data center	Control and Monitoring System: Supports Up to 6 intelligent sensor Virtual Sensors monitor power, Modbus, network devices, and other SNMP based equipment. Built-in graphing and data logging, internally or to a remote PC. Platform independent; free firmware upgrades and utilities. Enables Access Control of 2 Doors using single Door Control unit Supports Internal Audio Speaker Supports Internal Microphone Support 6 Full Auto Sense RJ-45 ports At least 3x RJ-45 Expansion Ports Capable of 10/100Mbps Ethernet Port Embedded web server display sensor information and live video from connected cameras Integrates with network management system via SNMPv1 and Encrypted SNMPv3 Stream sensor information directly to cellphone or PDA ability to connect external GPRS/ GSM modem, Bluetooth and Wi-Fi USB adapters. Uses Linux operating system One year warranty Power System: Supply and installation of cable ladders (150mm wide for cable

	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power system	n for a data center
Purpose: To support day	-to-day operation of delivery units and information
exchange among AMCEN	N's customers, partners and stakeholders.
	raceway power cable)
	Supply and Installation of 3-phase electrical power
	distribution system, electrical cabinet, convenience
	power outlets, LED lighting fixtures, switches, and all
	electrical materials and accessories, including feeder
	line wires and components, royal cords, THHN wires,
	main and sub breakers and panel boards for the UPS,
	AC, and other auxiliary systems inside the server room.
	Raise floor:
	Supply and installation of raised flooring
	Supply and installation of 900mm x 2100mm x 12mm
	glass panel door, top and bottom analog frame
	Inclusive of painting works (as needed) and finishing,
	raised flooring, with all restoration works required for a
	3m x 4m room
	Should be capable to be integrated to monitoring and
	control system through a software command control
2.2 One (1) set	application and platform.
` '	Capable of higher level of integration to the following
Door Access	system : CCTV Surveillance System, Car Parking,
Control System	Intrusion System, Elevator / Lift Control, Point.
	Includes fingerprint controller, Exit reader, power supply
	in metal enclosure, Mifare Cards.
0.0 True (0) mas	One (1) year Warranty
2.3 Two (2) pcs.	23cm power in / out cable with bare ends
Inline power Meter	·
2.4 One (1) pc.	10 feet with sensing module, standard 18 feet non-
Rope water sensor	sensing cable and 8 feet sensing rope
2.5 One (1) pc.	
Single port	
	Extension cable 5ft included
temperature and	
Humidity sensor	
2.6 One (1) pc.	
Airlink USB-based	Modem for text alert
GSM/GPRS	
3. FIRE	
SUPPRESSION	
SYSTEM	
	In accordance with the guidelines contained in NFPA 72
3.1 One (1) lot Fire	(2002), approved by Factory Mutual (FM), ANSI 864, 9th edition, UL Listed to ANSI 864.
suppression	Capable of suppressing surface burning fire in Class A,
· · ·	B and C hazzards. Ozone depleting potential (ODP) is
system	zero
	Component Specification:

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power system	•
	ay-to-day operation of delivery units and information
exchange among AMCI	EN's customers, partners and stakeholders.
	a. Beta cylinder assembly to be filled with at least 65 lbs
	Ibs and
	b. Complete Kit, with accessories, 24VDC
	c. Discharge Tube, Valve outlet adapter
	d. 360 degree Discharge Nozzle 8 port (2 Ea) e. Single releasing control Panel
	f. Back-up Battery. 12VDC (2 units)
	g. Smoke detector Ionization Sys Sensor h. Smoke detector Photoelectric Sys Sensor
	i. Standard base two wire (4 units)
	j. Manual release station (1 unit)
	k. Abort toggle switch station I. at least 5.5" diameter fire alarm (1 unit)
	m. Horne strobe system sensor (1 unit)
	One (1) year warranty
4. SERVER	
	Processor: 5198 2.1 Ghz 32-Core Xeon Gold
	Processors
	Chipset: Intel C621 Memory: at least 118gb DDR4 2666 ECC Registered;
	10DIMM slots, Expansion Slots: atleast 3 x PCI-E 3.0 x
	6 (FHHL), 2 x PCI-E 3.0 x 6 (LP), 1 x PCI-E 3.0 x14 for
	Add-on-Module (AOM), 1 x PCI-E 3.0 x 3 NVMe M.2 slot
	Onboard LAN: 2 x 1GbE LAN ports via Intel C621
4.1 One (1) set 2U	Onboard Graphics: ASPEED AST2500 BMC
Rackmount Server	Storage Controller: Broadcom 3108 SAS / SATA add-on controller 2GB 1866MHz DDR3 on-card cache
	Storage: 3 x 4TB SATA Enterprise 7200 RPM RAID 5
	Drive Bays: atleast 6 x Hot-swap 3.5" SAS/SATA drive
	bays Power Supply: 998.5 W Redundant PSU Titanium Level
	(96% Efficiency)
	Cooling System: 3 x Hot-swap 7cm redundant PWM cooling fans, Format Factor: 2U Rackmount
	Three (3) years Warranty / 8 x 5 Next Business Days
40.0 (4) !!	service, parts and labor
4.2 One (1) lic.	Windows Sever Datacenter 2019 64Bit English 1pk DSP
Operating System	OEI DVD 24 Core
5. RACK SYSTEM AND PDUs 42U	
VIAN L DO2 450	With 595.5 X1069.5 C/W perforated doors w/ lock and
	key, slit slide panels, EIA Mounting rails; leveling feet;
5.1 One (1) set 42U	color black curved front door.
Rack	A complete rack includes all of the following: 1. Rack Frame
	2. Top cover
	3. Front door
	4. Split side panels

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of Control System with provision for anti-static Compliance
setup and power syst	
Purpose: To support d	ay-to-day operation of delivery units and information
exchange among AMC	EN's customers, partners and stakeholders.
	5. Cage nuts, washer and screw (48 sets)6. Vertical cable panels for cable and mounting of
	PDU (2pcs)
	7. Foot levelers (4pcs)
	8. Rack Connector (2sets- 4pcs per rack) 9. All connection and accessories and screws
	10. Rack basic PDU: at least 30A C20, 18way c13 + 2
	way C18 meter, Black 11. Basic PDU, 8x14-14 Socket, 1U, Black
	Phil flex Royal Cord 3C #10 (55m)
	Twist Lock Outlet Set 4 sets
5.2 One (1) set of	
Console Table and	Standard office table and chair
Chair	
6. IT EQUIPMENT	
& VIDEO	
CONFERENCING	
SYSTEM FOR	
BOARD ROOM, TRAINING ROOM	
& CONFERENCE	
ROOM	
I COM	Support Multi-cast. Capable of Dual Network. Support
	Cascade Mode Application. Capable of Recording with
	USB Memory Enabling High-Definition Web Conferences. Broadband
	Stereo Full Duplex Audio. High quality video Full-HD
	1080/60p Adjusts data traffic based on network congestion
	through the use of Rate Control function. With Remote
	Camera Control With a unique Echo Canceller and with Smooth 2-way
	conversation with broadband stereo. Easy-to-understand
6.1 One (1) set	remote lectures and seminars are conducted at multiple
Video	sites Connect to a sub-camera to share zoom and still images
Conferencing Main	Compatible with other brand device. With Low
Unit	Bandwidth Communication Support External Control Interface
	Communication Method: SIP, H.323
	Video Compression Method: H.260.5 (mainstream only), H.263, H.263+, H.263++ (reception only), H.263
	High Profile, H.263 Baseline Profile
	Audio Compression Method: G.711 μ-law, A-law (3.4
	kHz@64 kbps) G.722 (7.0 kHz@64 kbps) G.722.1 (7.0 kHz@32 kbps)
	G.722.1 Annex C (14.0 kHz@48 kbps/24 kbps)
	MPEG-4 AAC-LD Mono (7.0 kHz@32 kbps, 14.0 kHz@64 kbps, 22.0 kHz@96 kbps)
	MPEG-4 AAC-LD Stereo (14.0 kHz@64 kbps, 22.0

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. kHz@96 kbps) No. of Channels: G.711/G.722/G.722.1/G.722.1 Annex MPEG-4 AAC-LD Mono: 1/ MPEG-4 AAC-LD Stereo: 2 Remote Camera Control: H.223. H.279 (Zoom/Pan/Tilt/Preset) Dual Stream - Method: H.235 (H.321), BFCP (SIP) Multi-Monitor: atleast 2 displays No. of Applicable Resolution Frames - Main: Max. 1080p 25 frames/second, Sub: Max. 1080p 25 frames/second Encryption: SRTP (AES 126 bit), H.234 (AES 126 bit) **Other: H.460** Communication Bandwidth: 253 kbps to 22 Mbps Video Compatible Resolutions*1: 176 x 144p, 352 x 240p, 352 x 288p, 512 x 288p, 640 x 480p, 704 x 480p, 704 x 576p, 768 x 432p, 800 x 600p, 1024 x 768p, 1280 720p. 1280 768p. 1280 x 800p, 1920 x 1080p No. of Frames: Max. 57 frames/second (for H.264 (q080t) Screen Display: Full-screen, Picture in Picture, Picture with Picture, Side by Side Audio: Echo canceller, Auto gain control, Stationary noise reduction, Lip synch, Equalizer, Mic mute I/O Terminals Video Input: Camera*2: HDMI main x 1, HDMI sub x 1 Input resolution: 1280 x 720p, 1920 x 1080i, 1920 x 1080p PC: RGB x 1(Mini D-sub 13pin), HDMI x 1*2 Input resolution: VGA, SVGA, XGA, HD, WXGA, SXGA, FWXGA, WXGA+, WXGA++, UXGA, WSXGA+, Full-HD Video Output: HDMI x 2, HDMI x 1 (For own site/recording video), RCA x 1 (Component) Supported output resolutions: 1918 x 1080i, 1918 x 1080p Audio Input: Digital Boundary Microphone x 1 (KX-VCA001) Max. 4, Analogue Boundary Microphone x 1 (KX-VCA002) Max. 1, HDMI, Stereo mini-plug*3*4 x 1 (ø3.5 mm), RCA*5 (Stereo) x 1 Audio Output: HDMI*6, Stereo mini-plug*3*7 x 1 (ø3.5 mm), RCA*8 x 1 (Stereo) Network: RJ45 x 2 (1000BASE-T/100BASE-TX Full Duplex)

> (Not used) Simultaneous Connection of Sites: (Expandable up to 24)

> External Control: RS-232C x 1 (Also used for

Others: USB 2.0*9 x 1, Camera Control Terminal x 1

maintenance)

Content Sharing: PC (RGB/HDMI), Sub-camera (HDMI

USB Host Mode (USB Memory): Updating Software, Recording, Import: Contact List / Profile*10 / Configuration Data /

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of	
etc.), Monitoring and setup and power syst	d Control System with provision for anti-static Compliance rem for a data center	
	ay-to-day operation of delivery units and information	
	EN's customers, partners and stakeholders.	
	Encryption Data /	
	Start-up Screen / Delivery Tree List	
	Export: Contact List / Profile*10 / Configuration Data /	
	Encryption Data /	
	Delivery Tree List USB Device Mode: USB Video Class: Version 1.0 USB	
	Audio Class: Version 1.0	
	Network Protocol: TCP/IPv4, TCP/IPv6*11, UDP/IPv4,	
	UDP/IPv6*11, DHCP, DNS,	
	HTTP, HTTPS, TELNET, NTP	
	Network Functions: Packet resending (ARQ), Forward	
	Error Correction (FEC),	
	Adaptive Rate Control (ARC), Reorder, Packet Shaping, Arbitrary Port Setting, NAT Compatibility, Encryption,	
	IP Precedence/DiffServ Support	
	External Control: Via Web Browser, Control by HTTP	
	CGI, TELNET, RS-232C	
	Connection Modes: IP mode, NAT Traversal mode, IP /	
	NAT Traversal mode	
	Dimensions (width x depth x height): Approx. 318 mm x approx. 267 mm x approx. 59 mm (Excluding	
	projecting parts)	
	Weight: Approx. 3.3 kg (approx. 7.3 lb)	
	Power Input: AC 100-240 V, -1.0 A, 45/55 Hz	
	Power Consumption: Maximum: approx. 70 W,	
	Standby:	
	0.5 W DC Power Input: DC 24 V, 2.5 A	
	Operating Temperature: 0 °C to 40 °C (32 °F to 104	
	°F)	
	Operating Humidity: 10 % to 90 % (non-condensing)	
	Language: English, German, French, Italian, Spanish,	
	Dutch, Portuguese, Japanese, Russian, Chinese, Arabic	
	With 1 free HDVC Mobile License for 1 year One (1) year warranty	
	Maximum Pickup Range : Approx. 3.5 m (radius)	
	Pickup Method : Stereo / Monaural *11.5	
	"Microphone Unit : Unidirectional ECM	
	microphone parts at least x 3"	
6.3 Three (3) set	Number of Connections : Maximum 4 microphones	
` '	Maximum Input Sound Pressure : 105 dBspl Number of Terminals for Microphone Connection : 2	
Video	Dimensions : Approx. 118 mm (diameter) x 25 mm	
Conferencing	Cable Length : Approx. 7.5 m	
Microphone	Power Input : Supplied from main unit via proprietary	
	cable	
	Weight: Approx. 275 g Operating Temperature: 0 °C to 40 °C	
	Operating Humidity: 10 % to 90 % (non-condensing)	
	One (1) year warranty	
6.4 One (1) set	Dimensions (diameter x length) : 7 mm (cable outer	
Extension Cable	diameter) x 20 m	
for Microphone	Weight: 1.3 kg	
ioi micropriorie	Operating Temperature : 0 °C to 40 °C	

	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
setup and power syst	
	ay-to-day operation of delivery units and information
unit	EN's customers, partners and stakeholders. Operating Humidity: 10 % to 90 % (non-condensing)
unit	Effective Pixels: 1918 x 1080i, 1918 x 1080p
6.5 One (1) set Video Conference Camera	Pan / Tilt : Pan: ±95°, Tilt: ±19° Zoom (optical/digital) : 2x / 3x Angle of view (optical zoom) : Horizontal angle of view, 80° (Wide end) – 29.5° (Tele end), Vertical angle of view 65.4° (Wide end) -, 20.5° (Tele end), F1.2 (Wide end) -, F2.1 (Tele end); Presets : at least 10 positions Connection Cable : HDMI Dimensions (width x depth x height) : Approx. 130 mm x approx. 125 mm x approx. 134 mm Weight : Approx. 0.6 kg Operating Temperature : 0 °C to 40 °C Operating Humidity : 10 % to 90 % (non-condensing) One (1) year warranty
6.6 One (1) set LCD Laser Projector	Technology: Laser LCD. Brightness: at least 5 000 - 5 450 lumens. Power Supply AC 100-240 V, 45.5-58 Hz Power Consumption: *1 435W (during standby) Approx. 0.4 W (When [STANDBY MODE] is set to [ECO]) Approx. 20 W (When [STANDBY MODE] is set to [NORMAL]) Approx. 47 W(When [IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is output, and USB memory is inserted in the terminal) Approx. 115 W(When [QUICK STARTUP] is set to [ON], [IN STANDBY MODE] in [AUDIO SETTING] is set to [ON], maximum audio is output, and the power is supplied from the terminal BTU Value: Max 1,533BTU LCD Panel Panel Size: 17.3 mm (0.76 inches) diagonal (16:10 aspect ratio) LCD Panel Display Method: Transparent LCD panel (x 3, R/G/B) LCD Panel Drive Method: Active matrix method LCD Panel Pixels: 2,299,000 (1918 x 1198) x 3, total of 6,899,000 pixels Light Source: Laser Diode Laser class 1 (Class3R for US models) Illumination Life of Set: Varies depending on operation mode setting. 20,000 hours at half luminance * IEC62087: 2008 Broadcast contents, Dynamic contrast [2], Temperature: 30°C (86F), Under conditions of 0.15 mg/m 3 of particulate matte Projection Size: 1.02–10.16 m (40–400 inches) diagonally, 16:10 aspect ratio Light output * 5 000 - 5 450 lumens (Input signals: PC, Operating mode: Normal, Dynamic mode) Center-to-Corner Uniformity: 90% Contrast Ratio: *1 2,999,000:1(all white/all black)(Dynamic Contrast 1 or 2) (Input signals: PC, Operating mode: Normal, Dynamic mode) Resolution: WUXGA 1918 x 1198 pixels Scanning Frequency RGB: fH: 15- 91kHz, fV: 24 - 100Hz, dot clock: 162 MHz or less

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center

Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders.

Scanning frequency | YPBPR(YCBCR): 480i (525i): fH 15.73 kHz; fV 59.94 Hz, 576i (625i): fH 15.63 kHz; fV 50 Hz, 480p (525p): fH 31.47 kHz; fV 59.94Hz, 576p (625p): fH 31.25 kHz; fV 50 Hz, 720 (750)/60p: fH 45.00 kHz; fV 60 Hz, 720 (750)/50p: fH 37.50 kHz; fV 50 H z, 1080 (1125)/60i: fH 33.75 kHz; fV 60 Hz, 1080 (1125)/50i: fH 28.13 kHz; fV 50 Hz, 1080 (1125)/25p: fH 28.13 kHz; fV 25 Hz, 1080 (1125)/24p: fH 27.00 kHz; fV 24 Hz, 1080 (1125)/24sF: fH 27.00 kHz; fV 48 Hz, 1080 (1125)/30p: fH 33.75 kHz; fV 30 Hz, 1080 (1125)/60p: fH 67.50 kHz; fV 60 Hz, 1080 (1125)/50p: fH 56.25 kHz; fV 50 Hz

Scanning Frequency | Video: fH: 14.70 kHz / 15.20 kHz fV: 55.55 Hz / 45.5 Hz [NTSC/NTSC4.43/PAL/PAL60/PAL-N/PAL-M/SECAM]

Scanning Frequency | HDMI/DIGITAL LINK: · Moving image signal resolution: 480i (525i)*2, 576i (625i)*2, 480p (525p), 576p (625p), 720 (750)/60p, 720 (750)/50p, 1080 (1125)/60i, 1080 (1125)/25p, 1080 (1125)/24p, 1080 (1125)/24sF, 1080 (1125)/30p, 1080 (1125)/60p, 1080 (1125)/50p Still image signal resolution: 640 x 400 to 1920 x 1200 (non-interlace) · Dot clock frequency: 25 MHz to 162 MHz

Optical Axis Shift: Vertical ±67%, Horizontal ±35% (Supplied lens/ET-ELS20/ET-ELW20/ET-ELT20/ET-ELT21) Vertical ±60%, Horizontal ±30% (ET-ELW22) NOTE: Optical axis shift function cannot be operated when used with the ET-ELW21.

Installation: Ceiling/desk/AUTO, front/rear, 360 degree free installation

Speaker: 3.5 cm round-type x 1

Maximum Usable Volume Output: 8.5 W (monaural)

Terminals | HDMI 1 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals : Linear PCM (Sample frequency : 45 kHz/44.1 kHz/32 kHz)

Terminals | HDMI 2 In: HDMI 19 pin, HDCP and Deep color compatible Audio signals : Linear PCM (Sample frequency : 45 kHz/44.1 kHz/32 kHz)

Terminals | RGB 1 In: BNC (female) x 4, RGB/Y PB/PR (CB/CR)

Terminals | RGB 2 In: D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR)

Terminals | Monitor Out:D-Sub 15 p (female) x 1, RGB/Y PB/PR (CB/CR)

Terminals | Video In:Pin jack x 1

Terminals | Audio In 1: M3 stereo jack x 1(L-R)

Terminals | Audio In 2: M3 stereo jack x 1(L-R)

Terminals | Audio In 3: Pin jack x 2(L-R)

Terminals | Variable Audio Out: M3 jack, 0 V[rms] to 2.0 V[rms] variable, output imedance 2.2 k ohms and less Terminals | Serial In: D-sub 9 pin, RS-232C compliant,

for computer control use

Terminals | REMOTE 1:D-Sub 9 p (female) x 1, for

-	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
•	Control System with provision for anti-static Compliance
setup and power system	
Purpose: To support da	ay-to-day operation of delivery units and information
exchange among AMCI	EN's customers, partners and stakeholders.
	external control (parallel)
	Terminals REMOTE 2:M3 jack x 1(L-R) for link control
	(for wired remote control)
	Terminals LAN: RJ-45 x 1 for network connection,
	10/100Base-TX, compliant with PJLink™(Class 2) Terminals DIGITAL LINK/LAN: RJ-45 x 1 for network
	and DIGITAL LINK (video/network/serial control)
	connection, 100Base-TX, compliant with PJLink™(Class
	2), Deep Color, HDCP
	Terminals VIEWER / PAIRING: USB type-A x 1
	Terminals DC Out: USB type-A x 1(DC 5V, 2A(Max))
	Power Cord Length: 3.0m(9ft 10in)
	Noise Level: *1 32dB (Operating mode: NORMAL/ECO), 26dB (Operating mode: QUIET)
	Operating mode. QOILT) Operating environment Temperature: 0°C (32°F) to
	45°C (113°F) The projector cannot be used at an
	altitude of 2,700 m (8,858') or higher above sea level.
	The light output may decrease to protect the projector
	when the operating environment temperature exceeds
	36 °C (96.8 °F). Operating Environment Humidity: 20% to 80% (no
	condensation)
	One (1) year warranty
6.7 One (1) pc.	Support at least 20+3*10/100/1000M RJ45 ports and
` , •	2*1000M uplink SFP fiber slot ports, port 1-23 can
Unmanaged PoE	support IEEE 802.3af/at PoE standard, Built-in 235W
fiber switch	power supply. Support 1U/18 inch rack installation.
6.8 One (1) pc.	Supports 802.11ac standard Simultaneous 2.4GHz 300
\ /	Mbps and 5GHz 867 Mbps connections for 1198 Mbps
Router	of total available bandwidth
	Laser LCD, 4,500 – 4,900 lumens, WUXGA
	Compact and lightweight body bringing high brightness
	dynamic image Long lasting laser light source provide consistent
	brightness
	1.3 x zoom and wide horizontal and vertical lens shift for
	flexible installation
	Long lasting laser light source and low-maintenance
	design provide high brightness and superb image quality Light output*1: 4,500 – 4,900 lumens
60 Two (2) coto	Technology: Laser LCD
6.9 Two (2) sets	LCD panel Panel size (mm): 14 mm diagonal (15:9
Laser Projector	aspect ratio)
	LCD panel Panel size (inch): 0.62 inch diagonal (15:9
	aspect ratio)
	LCD panel Display method: Transparent LCD panel (x 3, R/G/B)
	LCD panel Drive method: Active matrix
	LCD panel Pixels: 2,304,000 (1918 x 1198) x 3, total of
	5,500,000 pixels
	LENS: 1.6 x Manual zoom (throw ratio 1.09-1.77 :1), F =
	1.60-2.12, f = 15.30-24.64 mm
	Light source: Laser diode

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center

Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders.

Screen size (diagonal) (mm): 0.76 - 7.62 m, 16:10 aspect ratio

Screen size (diagonal) (inch): 25-298 in, 15:9 aspect ratio

Center-to-corner uniformity*1: 85%

Contrast*1: 2,999,000:1 (all white/all black) (Input signals:PC,LIGHT POWER:NORMAL,PICTURE MODE:DYNAMIC,DAYLIGHT WIEW:OFF,DYNAMIC CONTRAST:[1],AUTO POWER SAVE:OFF)

Resolution: 1918 x 1198 pixels

Optical axis shift | Vertical (from center of screen): 0 % - +44 % (Manual)

Optical axis shift | Horizontal (from center of screen): - 20% - +20% (Manual)

Keystone correction range*2: Vertical: ±22°, Horizontal: ±33°

Installation: Horizontal/Vertical, free 360-degree installation

Terminals | HDMI 1/2 IN: HDMI 18-pin x 2 (Compatible with HDCP, Deep Color, 4K/30p signal input)

Terminals | COMPUTER 1 IN: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR)

Terminals | COMPUTER 2 IN / MONITOR OUT: D-sub 13-pin (female) x 1 (RGB/YPBPR/YCBCR) (input/output switching)

Terminals | VIDEO IN: Pin jack x 1

Terminals | AUDIO 1/2 IN: M3 stereo mini-jack x 2

Terminals | AUDIO 3 IN: Pin jack (L/R) x 1

Terminals | VARIABLE AUDIO OUT: M3 stereo minijack x 1

Terminals | SERIAL IN: D-sub 9-pin x 1 for computer control (RS-232C compliant)

Terminals | LAN: RJ-45 x 1 for network control, 10Base-T, 100Base-TX, compatible with PJLink™ (Class 2)

Terminals | DIGITAL LINK/LAN: RJ-45 x 1 for network and DIGITAL LINK connection, HDBase-T™ complian, 100Base-TX, compatible with PJLink™ (Class 2), HDCP, Deep Color, 4K/28p signal input

Terminals | USB CONNECTOR: USB connector (Type A) x 1 for Memory Viewer function, power supply (DC5V, maximum 2A*3), optional wireless module AJ-WM50

Power supply: AC 100-240 V AC, 45/55 Hz

Power consumption: TBD

Built-in Speaker: 10 W (monaural)

Operating noise*1: NORMAL: 35dB, QUIET: 27dB

Cabinet materials: Molded plastic

Filter: Included

Filter cleaning cycle: 18,500 hours (0.08 mg/m3 of particulate matter), 9,900 hours (0.15 mg/m3 of

particulate matter)

Dimensions (W x H x D) (mm): 399 x 115 x 348 mm (Not including protruding parts)397 x 131 x 344 mm (With feet at shortest position)

Dimensions (W x H x D) (inch): 15 23/32 x 4 17/32 x 13

_	
	ne (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
,,	d Control System with provision for anti-static Compliance
setup and power syst	
	lay-to-day operation of delivery units and information
exchange among AMC	EN's customers, partners and stakeholders.
	11/16 inch (Not including protruding parts)15 23/32 x 5
	1/4 x 13 11/16 inch (With feet at shortest position) Weight (kg)*4: 7.2 kg
	Weight (kg) 4: 7:2 kg Weight (lbs.)*4:15.87 lbs.
	Operating environment (°C/M): Operating temperature: 0
	°C- 45 °C, operating humidity: 20 %-80 % (no
	condensation)
	Operating environment (°F/Feet): Operating
	temperature: 32 °F -113 °F, operating humidity: 20 %-80
	% (no condensation) Applicable software/application: Logo Transfer Software,
	Multi Monitoring & Control Software, Presenter Light for
	Windows®, Wireless Projector Apps for iOS/Android™
	With Ceiling mount bracket
	One (1) year warranty
	Installation Options: Floating Wall Mount / Ceiling Mount
6.10 Three (3) pcs.	/ Suspended Mount (using the "L bracket"). Control
102.5" Motorized	Options: IR / RF / RS485 + Dry Contact Control / 3-12
Screen (15:9)	Voltage Trigger Control / Central Control / IP. Control - •
, ,	Colour: Black / Whit• Aluminum Casing
	Minimum of 61W , 97 Volt
	Height- rack units (1U=43 mm) in U : 2
	Depth (incl front) in mm : at least 293 Emergency power supply: 24 VDC
	Output power RMS 100 volts in watts : 63
	Dynamic output power 100 volts in watts: 63
	Output power tappings: 97 – 67 volts – 7 ohms
	MIC inputs balanced: 2
	Line input unbalanced: 1
	Priority switch: 1 Chime: yes
	Priority output : 0
	Frequency response (in Hz) : 59 – 17 k
	Applicable in 100V: yes
• 44 = (0)	Net weight product (kg): 5.39
6.11 Two (2) sets	Depth (build in) in mm : 273 Power supply : 115 - 230 VAC
Amplifier System	Power consumption (max) in watts : 167
	Output power RMS 8 ohms in watts : 63
	Minimum impedance load in ohms : 7
	Zone outputs : 1
	Inputs with Phantom power : 2
	Tone control yes VOX mute: yes
	Emergency input: 0
	Priority levels: 2
	Cooling system: convection
	Applicable low impedance : yes
	Includes one (1) unit Multimedia player system:
	Includes one (1) unit Multimedia player system: HDMI Full HD Support; Full HD Video; Full HD Sound;
	Full HD Microphone
	1 dil 115 Milotophone

•	e (1) Lot IT System (Server, Switch, LAN, WAN, Control System with provision for anti-static em for a data center	
	ay-to-day operation of delivery units and information	
	EN's customers, partners and stakeholders.	
exchange among Awei	User Contents	
	- Fast USB to HDD Transfer	
	- Edit (Rename, Delete, Modify)	
	- Auto Song Numbering assignment	
	Recording function	
	- MTV, Chorus, MIDI may be recorded	
	- Transfer Recordings to USB	
	Edit (Rename, Delete, Modify)External USB HDDs Supported via USB connectivity	
	Multimedia Function	
	- Full Playback Function	
	- avi, rmbv, mkv, mpg, wmv, etc.	
	- mp3, wma, aac, wav, etc.	
	- jpg, bmp, gif, etc.	
	Specifications:	
	Processor: Cortex-A9 1.2GHz Dual core	
	RAM: DDR3, 1GB Memory	
	Operating System: Android 4.2 Jelly Bean	
	Storage: 1TB HDD	
	_	
	Microphone Input: Two (2) slots available	
	Microphone Volume: Available	
	Echo Volume: Available	
	USB Compatibility: Two (2) USB 2.0 Port	
	LED Backlit Buttons: Available	
	TV Input Channel: HDMI	
	: Video Out	
	:YPbPr Video Out	
	:Composite Video Out	
	Background Video Input: Two (2) Input Available	
	Audio Output :Analog Audio Out	
	:Optical Audio Out	
	:Coaxial Audio Out	
	Components	
	At least 7" woofer with woven fiberglass cone	
	1" PEI diaphragm tweeter with fluid cooling	
	Contemporary, high-design appearance	
	Built-in InvisiBall® mounting hardware, plus available U-	
	bracket	
6.12 Four (4) sets	Weather resistant enclosure and transducers	
Wall Speaker	Wide 90° x 90° coverage 115W power handling (235W program) in direct 7Ω	
wali Speaker	setting, plus built-in 55W 65V/95V multi-tap transformer	
	High fidelity sound character with broad frequency	
	response of 40 Hz – 18 kHz	
	System	
	Frequency Range (-10 dB) - 40 Hz – 18 kHz	
	Frequency Response (±3 dB) - 60 Hz – 15 kHz	
	Power Rating: 235W Continuous Program (2 hrs) 118W	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center		
Purpose: To support da	ay-to-day operation of delivery units and information	
xchange among AMCI	EN's customers, partners and stakeholders.	
exchange among AMCI	(475W peak), Continuous Pink Noise (2 hrs) 90W (360W peak) Continuous Pink Noise (100 hrs) Maximum Input Voltage – 27.5 V RMS (2 hrs), 55.0 V peak Maximum SPL3 – 112 dB ave. Continuous Pink Noise (118 dB peak) Sensitivity – 91 dB, 1W/1m (ave. 100 Hz – 10 kHz) Coverage Angle - 90° x 90° Directivity Factor (Q) - 7.3 (averaged 1kHz – 16kHz) Directivity Index (DI) – 8.3dB (averaged 1kHz – 16kHz) Nominal Impedance – 7 ohms (THRU setting) Crossover Type - 2nd order low-pass, 1st order high-pass, plus conjugate shaping Circuitry Transformer Taps – 65V: 55W, 25W, 10W, 6.5W 95V: 55W, 25W, 10W Insertion Loss: <0.94 dB at any tap setting Thru Setting: 7Ω nominal Recommended Protective High-Pass – 6 45 Hz high-pass (24 dB/oct) for 8Ω operation plus 15W and 7.5W taps; 55 Hz for 30W tap; 65 Hz for 60W tap Transducers Low Frequency – 198 mm (8 in), woven-fiberglass cone with pure butyl rubber surround with Weather-Edge frame protection, high-temp fiberglass voice coil former, high-temp voice coil wire, optimized cone geometry, linear suspension spider, and FEA optimized motor structure High Frequency – 23 mm (1 in) PEI diaphragm, low-viscosity ferromagnetic fluid, and lightweight Kapton™ voice coil former Physical Enclosure Material - High Impact Polystyrene (HIPS) with 10% glass fill, painted with highly-UV resistant paint on white (-WH) version for maximum UV fade resistance Grille – Highly zinc-plated, finished in durable TGIC polyester powder coating. MTC-28WMG-1 (&-WH) available with Weather-Max™ multi-layer foam and tight-weave mesh vapor barrier backing. Installation – InvisiBall wall-mounting system included. Two 6 mm attachment points (on top and bottom) for optional MTC-28WMG-1 (&-WH) U-bracket. Secondary safety attachment loop point on back panel. Agency Rating – ROHS-compliant; Transformer UL Recognized per UL1876	
	Dimensions - (H x W x D)7 386 x 282 x 219 mm (15.2 x 11.1 x 8.6 in); 277 mm (10.9 in) deep total when	
	mounted on InvisiBall wall-mount bracket; Net Weight – 6.8 kg (15.0 lbs) One (1) year warranty	
6.13 Two (2) sets	Designed metal housing with distinctive Aesthetic and	
Dual Handheld	ergonomic style Interchangeable capsule module with premium	
Microphone	condenser Patented capsule suspension design virtually Eliminates	

•	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of
setup and power syste	Control System with provision for anti-static Compliance
	/-to-day operation of delivery units and information
	N's customers, partners and stakeholders.
	vibration and handling noises
	Built-in high-efficiency antenna Backlit LCD displays all operational parameter
	information
	Provides precise and rapid frequency sync to the
	receiver Technical Specifications
	Frequency Range – UHF 478 – 931 MHz
	Bandwidth – 21 MHz
	Oscillation Mode – PLL Synthesized
	RF Output Power - 9 ~ 27mW (country dependent) Deviation - < ± 40 kHz
	Spurious Emissions < -53 dBc
	LCD Display - Group, Channel, Battery status & error
	codes Max. SPL – 135 dB SPL
	Battery Type - 2 × AA alkaline
	Operating Time – Min. 12 hours (Low Power)
	Current Consumption – Approx. 92 mA Dimensions - (Ø x L) 51 x 234 mm 2 x 9.2 "
	Net Weight - Approx. 251 g 8.9 oz
6.14 One (1) lot	
Speaker cable	
transparent #16	(XLR Male to XLR Female 1m), 3.5mm stere plug-2 X
AWG,	RCA Plug (1.5m)
Interconnector	
7. PABX	
EQUIPMENT	
	Support Multi-site networking. SIP Networking for Low
	cost. Flexible expansion by adding activation key.
	Support small to large communication system. Up to
	maximum 992 (with DXDP 1152) Extensions. Built-in support for Advanced IP extensions as well as
7.4 000 (4) 001	standard SIP phones. Easy Migration to IP
7.1 One (1) set	SIP trunking Integrated SIP telephony via ITSPs* and
PBX Main Unit	other SIP trunk Providers.
	It is a high intuitive PC Based application suit that blend
	powerful point and click telephony.
	Wireless Mobility Solutions. Built-in and Optional Voice Mail Processing system.
	Reduced Total Cost of Ownership.
7.2 Two (2) sets	
24-Port SLT	Physical Extension Cards with Caller ID and Massage Lamp Card
Extension Card	with Caller ID and Message Lamp Card
7.3 One (1) set 8-	
port Digital	Physical Extension Cards
Extension Card	

-	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
, , , , , , , , , , , , , , , , , , ,	Control System with provision for anti-static Compliance
setup and power syste	
	ay-to-day operation of delivery units and information
exchange among AMCE	EN's customers, partners and stakeholders.
7.4 One (1) set	L-Type
Power Supply unit	L-1 ype
7.5 One (1) set	
Back-up battery	included
Cable	
Cable	16 channel digital signal processor card with one 4
	channel IP trunk SHGW4 activation key and one 8
7.6 One (1) set 16-	channel IP proprietary telephone IPPT8 activation key
ch VoIP DSP Card	pre-installed
CII VOIP DSP Card	Compliant with ITU-T G.729a and G.711 codec methods
	Mounts on IPCMPR card
	3-Line Backlight LCD Display; 24 Flexible CO Buttons
	Full Duplex Speakerphone; EHS Support
	Specifications:
	Main LCD Display (Lines/Characters) – 3/16
	LCD Backlight- Yes
	Flexible CO Keys – 24
7.7 Three (3) sets	Navigator Keys- Yes
3-Line LCD Digital	Soft Keys – 4
Proprietary	Call Log Incoming/Outgoing Calls- Yes / Yes
	Speakerphone - Yes (Full Duplex)
Telephone	Headset Port – Yes
	Electric Hook Switch (EHS)*1 – Yes
	Dimensions (mm) *2 (Width × Depth × Height)
	High Position267×170×180Low
	Position267×187×155Weight (g)*31070ColorBlack,
	White
	1-line Graphical LCD with backlighting; 8 freely
	programmable function keys; Speaker Phone, handset
	and headset with full duplex; Available in black and
	white colour
	Specification:
	LCD Type - Graphic
	LCD Dots (W x H) 160 x 18
7.8 One (1) set 1-	LCD Line 1
Line Digital	LCD Character 16
Proprietary	LCD Backlight Yes (On/Automatic/Off) Headset Yes (2.5
Telephone	mm audio jack) Full Duplex
. 5.5656	Electronics Hook Switch (EHS) No
	Speakerphone Yes (Full Duplex)
	External Expansion 1 DXDP port
	Bluetooth (for Headset) No
	DXDP Yes
	XDP No
	Data Transmission Capability PBX to DPT: Cable fÓ0.5

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center

Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders.

mm 500 m DPT to DPT: Cable fÓ0.5 mm 50 m

Wall Mount Kit Yes (Option)

Dimension (W x D x H mm) LOW: 205 x 160 x 170

FF Keys 8

Soft Keys No

0-9, *, # Keys Yes

Redial Key Yes

Flash/Recall Key Yes

Hold Key Yes

SP-Phone Key Yes

Auto Answer/Mute Key Yes

Auto Dial/Store Key Yes

Transfer Key Yes

Intercom Key Yes

Pause Key - Yes

CONF Key - Yes

FWD/DND Key No

Message Key Yes

Navigator Key No

4-Directions Key Yes

Cancel Key No

LED Message/Ringer Lamp Yes (Green/Red) LED FF

Keys Yes (Green/Red) LED Intercom Yes

(Green) LED SP-Phone Yes

(Red) LED Auto Answer/Mute Yes (Red) LED Auto

Dial/Store Yes

(Red) LED CONF No LED FWD/DND Yes (Red)

Message/Ringing Lamp Yes

OHCA Yes Bluetooth Headset Adapter No Auto Redial

No Off-Hook Monitor Yes Handset/Headset Mic Mute

Yes Speakerphone Mic Mute Yes

Phone Directory Yes

Feature Access No

Outgoing Call Log Yes

Incoming Call Log Yes

Audio Codec Yes (G.711)

USB Unit I/F No

System Programming No

Station Programming Yes*1

Electric Volume Headset 6 levels

Electric Volume Handset 6 levels

Electric Volume Speakerphone 8 levels Electric Volume

Ringer 4 + Off

LCD Contrast 4 levels

Tones/Music Ring Tone 8

Tones/Music on Hold No (Tone)

Footnote *1 To operate by PROGRAM Key or PAUSE

	(1) Lot IT System (Server, Switch, LAN, WAN, Statement of
	Control System with provision for anti-static Compliance
setup and power syster	
	t-to-day operation of delivery units and information
exchange among AMCEN	N's customers, partners and stakeholders.
	Key
7.9 One (1) set 4-	4-Channel H.323/SIP Gateway Activation Key
Ch IP Trunk	4 Orlamici 11.020/On Galeway Activation Ney
	Integrated Telephone System
	Choice of Five Colors: black, white, red, dark
	blue and grey; Wall Mountable; Last Number
	Redial; Timed Flash
	·
	Electronic Volume Control; 3-Step Ringer
	Selector
7.10 Twelve (12)	Switchable Tone/Pulse Settings
sets Basic Single	Specifications:
Line Telephone	Dial Mode: Tone (DTMF)/pulse
	Redial: One-touch (32 digits)
	Flash: 600 ms
	Power Source: Telephone line
	Dimensions (H x W x D): 96 mm x 150 mm x
	200 mm
	Weight: 475 g
7.11 One (1) set	included
AVR 1000W	
7.12 Three (3) sets	included
12V Battery	modeca
7.13 Five (5) sets	included
Krone Terminal	modeca
7.14 Three (3) sets	
Amphenol Cable	included
with Head	
O Cumply and	
8. Supply and	
installation of IT	
equipment for the	
data center and	
other ICT	included
equipment.	included
Including	
(Refrigerant piping	
type M hard drawn	
copper pipe) and	

Item Description: One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of etc.), Monitoring and Control System with provision for anti-static Compliance setup and power system for a data center Purpose: To support day-to-day operation of delivery units and information exchange among AMCEN's customers, partners and stakeholders. ACCU to **FCU** electrical power vlagus (THHN Philflex) with PVC flexible conduit. 1" diameter **PVC** condensate drain pipe including insulating using 3/8" thick rubber insulation wrapped with polyethylene tape. Installation of FM200. installation of fire suppression panel. control programming and configuration. Installation of monitoring and control access system, configuration, testing and commissioning. PABX installation, tracing, termination, programming and testing. Tracing, termination and programming for HD visual communication system, projectors and audio system.

Testing

all

commissioning of

equipment,

and

	e (1) Lot IT System (Server, Switch, LAN, WAN, Statement	
	I Control System with provision for anti-static Complianc	е
setup and power syst	em for a data center	
Purpose: To support da	ay-to-day operation of delivery units and information	
exchange among AMC	EN's customers, partners and stakeholders.	
miscellaneous and		
consumables and		
training of all the		
system and		
integration.		
9. OTHER		
REQUIREMENTS		
	9.1 To ensure the quality of service the	
	9.1 To ensure the quality of service, the	
	contractor shall submit the following	
	documents:	
	Supplier must have at least five (5) years of experience	
	in supply, delivery, installation, testing and	
	commissioning of network equipment and structured	
	cabling system / Data Center Solution.	
	Supplier must have completed at least one (1) similar	
	projects in supply, delivery, installation, testing and	
	commissioning of network equipment and Data Center	
	Solution.	
	The supplier shall submit implementation time-line that	
	reflects all the milestones in Gantt chart.	
	Supervised by a Certified License Electronics and	
	Communication Engineer.	
	Supplier must have at least Three (3) Certified Data	
	Center Professionals (CDCP) duly employed by the	
	company for at least 5 years and above.	
	Managed by a registered Project Manager (PM) and shall	
	submit a certificate issued by the Project Management	
	Institute (PMI).	
	Contractors must have Philippine Contractors	
	Accreditation Board (PCAB) licenses required by Republic	
	Act 4566 to perform	
	telecommunications/communications installations.	
	The contractor shall be responsible for all required	
	permits.	
9.2 Maintenance /	One (1) year maintenance with quarterly preventive	
Support	maintenance visit	
Cupport		
9.3 Warranty	One (1) year Workmanship	
-	One (1) year Workmanship Operations and Maintenance Training prior to the	
	acceptance of the project. Including lectures and actual	
9.4 Training	demonstration for at least 8 hours for minimum of ten	
	(10) participants.	
	(10) βαπισβαπιο.	

Item Description: (One (1) Lot IT System (Server, Switch, LAN, WAN, Statement of
etc.), Monitoring a	nd C	ontrol System with provision for anti-static Compliance
setup and power sy	stem	for a data center
Purpose: To support	day-	to-day operation of delivery units and information
exchange among AM	ICEN [®]	s customers, partners and stakeholders.
9.5 Delivery	/	Project must be completed within 120 days upon receipt
Project Duration		of Notice to Proceed
9.6 Operations 8	k	
Maintenance		Included
Manual (English)		

Section VIII. Bidding Forms

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Bid Form

	Invitation	Date: to Bid ¹ N ^o :
To: [name and address of P	rocuring Entity]	
Gentlemen and/or Ladies:		
numbers], the receipt of wh [supply/deliver/perform] [deliver/perform] [deliver/perform] [to Documents for the sum of [to Documents]]	ich is hereby duly a escription of the G otal Bid amount in v	ts including Bid Bulletin Numbers [insert acknowledged, we, the undersigned, offer to oods] in conformity with the said Bidding words and figures] or such other sums as may of Prices attached herewith and made part of
We undertake, if our delivery schedule specified in		deliver the goods in accordance with the equirements.
If our Bid is accepted amounts, and within the time		provide a performance security in the form, dding Documents.
	shall remain bindin	Validity Period specified in <u>BDS</u> provision ag upon us and may be accepted at any time
Commissions or gratui and to contract execution if v	· -	to be paid by us to agents relating to this Bid, contract, are listed below: ²
Name and address of agent	Amount and Currency	Purpose of Commission or gratuity
(if none, state "None"	')	<u> </u>

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon us.

We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

¹ If ADB, JICA and WB funded projects, use IFB.

² Applicable only if the Funding Source is the ADB, JICA or WB.

We certify/confirm that we comply with the eligibility requirements as per **ITB** Clause 5 of the Bidding Documents.

We likewise certify/confirm that the undersigned, [for sole proprietorships, insert: as the owner and sole proprietor or authorized representative of <u>Name of Bidder</u>, has the full power and authority to participate, submit the bid, and to sign and execute the ensuing contract, on the latter's behalf for the <u>Name of Project</u> of the <u>Name of the Procuring Entity</u>] [for partnerships, corporations, cooperatives, or joint ventures, insert: is granted full power and authority by the <u>Name of Bidder</u>, to participate, submit the bid, and to sign and execute the ensuing contract on the latter's behalf for <u>Name of Project</u> of the <u>Name of the Procuring Entity</u>].

	_	n each and every page of this Bid Form, include ground for the rejection of our bid.	ding
Dated this	day of	20	
[signature]		[in the capacity of]	
Duly authorized to sig	n Bid for and on be	half of	

For Goods Offered From Abroad

N	Name of Bidder				Invitation to Bid ³ Number Page of				
				·					
1	2	3	4	5	6	7	8	9	
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DD (col 4 x 8)	
	ignature]				ı the capacı	ity of l		<u> </u>	
		ized to si	ign Bid f	or and on behalf o				_	

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 $^{^{3}}$ If ADB, JICA and WB funded projects, use IFB.

For Goods Offered From Within the Philippines

Name of Bidder	Invitation to Bid ⁴ Number Pa	ige of
----------------	--	--------

1	2	3	4	5	6	7	8	9	10
Item	Description	Country	Quantity	Unit price EXW	Transportation	Sales and	Cost of	Total Price,	Total Price
		of origin		per item	and Insurance	other taxes	Incidental	per unit	delivered Final
					and all other	payable if	Services, if	(col 5+6+7+8)	Destination
					costs	Contract is	applicable, per		(col 9) x (col 4)
					incidental to	awarded, per	item		
					delivery, per	item			
					item				

[signature]	[in the capacity of]
Duly authorized to sign Bid for and on beh	nalf of

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⁴ If ADB, JICA and WB funded projects, use IFB.

Contract Agreement Form

	THIS AGREEMENT made the	day of		20	between /	name of
PROC	CURING ENTITY] of the Philippines (hereinafter	called "the	Entity")	of the one	part and
	of Supplier] of [city and country of S	<i>Supplier]</i> (h	ereinafter o	alled "th	e Supplier	") of the
other p	part:					

WHEREAS the Entity invited Bids for certain goods and ancillary services, viz., [brief description of goods and services] and has accepted a Bid by the Supplier for the supply of those goods and services in the sum of [contract price in words and figures] (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Supplier's Bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.* bidder's response to clarifications on the bid), including corrections to the bid resulting from the Procuring Entity's bid evaluation;
 - (b) the Schedule of Requirements;
 - (c) the Technical Specifications;
 - (d) the General Conditions of Contract;
 - (e) the Special Conditions of Contract;
 - (f) the Performance Security; and
 - (g) the Entity's Notice of Award.
- 3. In consideration of the payments to be made by the Entity to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Entity to provide the goods and services and to remedy defects therein in conformity in all respects with the provisions of the Contract
- 4. The Entity hereby covenants to pay the Supplier in consideration of the provision of the goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the time and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

Signed, sealed, delivered by	the	(for the Entity)
Signed sealed delivered by	the	(for the Supplier)

Omnibus Sworn Statement

REPUBLIC OF THE PHILIPPINES)		
CITY/MUNICIPALITY OF)	S.	S

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. Select one, delete the other:

If a sole proprietorship: As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

- 3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct:
- 5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. Select one, delete the rest:

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of [Name of Bidder] is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and standards; and
- 8. [Name of Bidder] is aware of and has undertaken the following responsibilities as a Bidder:
 - a) Carefully examine all of the Bidding Documents;
 - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
- 9. [Name of Bidder] did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS	WHEREOF, 1	have	hereunto	set my	hand	this	day o	of,	20	at
, Phi	lippines.									

Bidder's Representative/Authorized Signatory

of execution], Philippines. Affiant/s is/are poby me through competent evidence of identification card used], with his/her photographs.	fore me this day of [month] [year] at [place ersonally known to me and was/were identified atity as defined in the 2004 Rules on Notarial chibited to me his/her [insert type of government graph and signature appearing thereon, with no. icate No issued on at
Witness my hand and seal this day	y of [month] [year].
;]]	NAME OF NOTARY PUBLIC Serial No. of Commission Notary Public for until Roll of Attorneys No PTR No [date issued], [place issued] IBP No [date issued], [place issued]
Doc. No Page No Book No Series of	

* This form will not apply for WB funded projects.

Bank Guarantee Form for Advance Payment

To: [name and address of PROCURING ENTITY] [name of Contract]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends Clause 10 of the General Conditions of Contract to provide for advance payment, [name and address of Supplier] (hereinafter called the "Supplier") shall deposit with the PROCURING ENTITY a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of [amount of guarantee in figures and words].

We, the [bank or financial institution], as instructed by the Supplier, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the PROCURING ENTITY on its first demand without whatsoever right of objection on our part and without its first claim to the Supplier, in the amount not exceeding [amount of guarantee in figures and words].

We further agree that no change or addition to or other modification of the terms of the Contract to be performed thereunder or of any of the Contract documents which may be made between the PROCURING ENTITY and the Supplier, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until [date].

Signature and seal of the Guarantors

Yours truly,

[name of bo	ınk or finar	icial instii	tution]		
[address]					
[date]					

BID SECURING DECLARATION FORM

REPUBLIC OF THE PH	ILIPPINES)
CITY OF) S.S.
X	X

BID SECURING DECLARATION Invitation to Bid: [Insert Reference number]

To: [Insert name and address of the Procuring Entity]

I/We⁵, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid-Securing Declaration.

- 2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting order; and, (b) I/we will pay the applicable fine provided under Section 6 of the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the procuring entity for the commission of acts resulting to the enforcement of the bid securing declaration under Sections 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA 9184; without prejudice to other legal action the government may undertake.
- 3. I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:
 - (a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
 - (b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;
 - (c) I am/we are declared the bidder with the Lowest Calculated Responsive Bid, and I/we have furnished the performance security and signed the Contract.

⁵ Select one and delete the other. Adopt the same instruction for similar terms throughout the document.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of [month] [year] at [place of execution].

[Insert NAME OF BIDDER'S AUTHORIZED REPRESENTATIVE]
[Insert Signatory's Legal Capacity]
Affiant

SUBSCRIBED AND SWORN to before me this day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no and his/her Community Tax Certificate No issued on at
Witness my hand and seal this day of [month] [year].
NAME OF NOTARY PUBLIC Serial No. of Commission Notary Public for until Roll of Attorneys No PTR No [date issued], [place issued] IBP No [date issued], [place issued]
Doc. No Page No Book No Series of

STATEMENT OF SINGLE LARGEST COMPLETED GOVERNMENT OR

PRIVATE CONTRACTS, WHICH ARE SIMILAR IN NATURE AND COMPLEXITY TO THE CONTRACT TO BE BID

Business Name:					
Business Address: _					
Name of Contract	a. Own Name	a. Date of	Kinds of	a. Amount of	a. Date of
		the Contract	Goods	Contracts	Delivery
	b. Address				
	c. Telephone				
	Nos.				
GOVERNMENT					
PRIVATE					
Note: This statemen					
1. Notices of Award			ntract		
2. Official Receipts					
3. Certificate of Acc	ceptance, if appli	cable			
Submitted by :					
	(Printe	ed Name & Sign	nature)		
Decignation :					

STATEMENT OF ALL ON-GOING GOVERNMENT & PRIVATE CONTRACTS, INCLUDING CONTRACTS AWARDED BUT NOT YET STARTED, IF ANY, WHETHER SIMILAR OR NOT ARE SIMILAR IN NATURE AND COMPLEXITY TO THE CONTRACT TO BE BID

Business Name:					
Business Address:					
					T
Name of Contract	a. Own Name	a. Date of	Kinds of	Value of	Expected
	1 4 1 1	the	Goods	Outstanding	Delivery
	b. Address	Contract		Contracts	Date
	c.Telephone				
	Nos.				
	1103.				
GOVERNMENT					
PRIVATE					
IRIVAIL					
Note: This statem	ent shall be su	pported by t	the Notices	of Award and/o	or Notices to
Proceed/Contract.					
~					
Submitted by :					
D ' '	,	ed Name & Si	•		
D .					
Date :					

STATEMENT OF NFCC COMPUTATION

	Date:
The BAC Chairman Metals Industry Research and Development Center	
Contract to be Bid :	
Contract to be Bid :	
The undersigned duly authorized representative Bidder hereby submits this statement of Net Final relation with the Application for Eligibility to Bid:	
Current Assets	₱
Less: Current Liabilities	
Net Current Assets	
Multiply by:	15
Less: Value of On-going Contracts & Awarded contracts yet started	₽
NFCC	₱
	Name of Authorized Signatory
	Signature

(Name of Bank)

COMMITTED LINE OF CREDIT CERTIFICATE

Date:					
METALS INDUSTRY RESEARCH A	ND DEVELOPM	ENT CENTER			
Gen.Santos Avenue, Bicutan, Taguig City					
CONTRACT/PROJECT COMPANY/FIRM	: :				
ADDRESS BANK/FINANCING INSTITUTION ADDRESS AMOUNT	:				
This is to certify that the a commits to provide the (Supplier/Dist a credit line in the amount specified above-mentioned contract subject to	tributor/Manufact I above which sh	urer/Contractor) nall be exclusive	, if awarded thely used to fir	ne above-men	tioned Contract,
The credit line shall be (Supplier/Distributor/Manufacturer/Countil issuance of Certificate of Accept	ontractor) of the I	•	•	-	
This Certification is being connection with the bidding requirem for the above-mentioned Contract. Verjury.	nent of METALS	INDUSTRY RE	SEARCH AN	ID DEVELOP	MENT CENTER
This committed line of cred METALS INDUSTRY RESEARCH AI			celled without	the prior writ	tten approval of
Name and Signature of Authorized F	inancing Institution	on Office			
Official Designation					
Concurred By:					
Name & Signature of (Supplier/Distrib	 outor/Manufactur	er/Contractor's)	Authorized R	 epresentative	
Official Designation					
SUBSCRIBED AND SWORN TO BEFOI Philippines. Affiant exhibited to me Notarial Practiceissu	his/her compete	ent Evidence of	Identity (as o	defined by the	e 2004 Rules on
Dog No.			ľ	NOTARY P	UBLIC
Doc. No. : Book No. :	Series of	 	ĽJ-4- 1\		
(Note: The Amount committee)	tea snoula be	macnine val	naatea)		

