<u>CORRIGENDUM – II</u>

TENDER NO. WTL/HC/AMC/23-24/038 DATED 07.11.2023

Sl. No.	Section No.	Page / Clause No.	Clause Description	Clarification / Revised Clause
1	SECTION - I (TECHNICAL SPECIFICATI ON COMPLIANCE STATEMENT)	Page No. 27, Sl. No. 15	Screen Size & Resolution: Non-touch 21.5 inch or higher, FHD or higher Resolution or better with relevant TCO Certification	Screen Size & Resolution: Non- touch 23.8 inch or higher, FHD or higher Resolution or better with relevant TCO Certification
2	SECTION - I	Page no. 27, Sl. No. 5	Processor & Motherboard Base Frequency : 2.6 GHz or more	Processor & Motherboard Base Frequency : 2.5 GHz or more
3	SECTION - I	Page no. 27, Sl. No. 9	Memory and Disk Storage System Memory (RAM): 8 GB DDR3 with one unused slot	Memory and Disk Storage System Memory (RAM) : 8 GB DDR4 with one unused slot
4	SECTION - I	Page no. 27, Sl. No. 11	Memory and Disk Storage Hard Disk: Integrated Dual Port SATA III Controller, SSD 512 GB, 7200 RPM or more.	Memory and Disk Storage Hard Disk: Integrated Dual Port SATA III Controller, SSD 512 GB M.2 NVMe.
5	SECTION - I	Page no. 27, Sl. No. 13	Platform / Architecture Operating System Certification: Winll professional and Ubuntu - Linux 20.04 LTS	Platform / Architecture Operating System Certification: Win11 professional certification. Manufacturers (OEM) that the offered systems are compatible with the latest versions of Ubuntu Linux 20.04 and Win11 professional certifications. Confirmation is required in OEM's letterhead that the offered systems are compatible with the latest versions of Ubuntu Linux 20.04
6	SECTION - I	Page no. 28, Sl. No. 25	Input Web Camera: 1.0 Megapixel HD Built in Webcam	Input Web Camera: 5.0 Megapixel HD Built in Webcam or above
7	SECTION - I	Page no. 28, Sl. No. 19	Display & Graphics Display resolution (PIXELS): 120 x 1080 or higher	Display & Graphics Display resolution (PIXELS): 1920 x 1080 or higher.
8	SECTION - I	Page no. 28, Sl. No. 31	Communication: Bluetooth Connectivity: Yes (5.2 or Higher)	Communication: Bluetooth Connectivity: Yes (5.0 or Higher)
9	SECTION – H BILL OF MATERIAL	Page No. 26, Sl. No. 2	700 /750 VA Line Interactive UPS with 3 years on-site comprehensive warranty (Battery 2 years onsite comprehensive warranty), Make: APC / Liebert or equivalent.	600VA / 650 VA / 750 VA Line Interactive UPS (108 VAH) with 15 to 20 mins battery back up on full load with 3 years on-site comprehensive warranty (Battery 2 years on-site comprehensive warranty)

		I	T	Tage
				Minimum Specification of 19" 6U Wall mounting Rack
10	SECTION - I (TECHNICAL SPECIFICATI ON COMPLIANCE STATEMENT)	Page No. 32, Sl. No. 5	Minimum Specification of 19" 6U Wall mounting Rack 19" 6U wall mounting rack with Cantilever tray, 6 sockets 5/15 Amp Power Strip, and Cooling Fan & accessories input 6 socket 5/15 Amp power strip & earthing kit. All equipment's housed properly, air circulation & properly locking system with key.	19" 6U wall mounting rack (min. Depth 600 mm, min width 550 mm) with Cantilever tray, 6 socket 5/15 Amp Power Strip, and Cooling Fan & accessories input 6 socket 5/15 Amp Power strip & earthing kit. All equipment's to be housed properly, air circulation & properly locking System with key. RACK OEM should have valid certificate of ISO 9001, ISO 14001 and ISO 45001. RACK should be UL Certified.
11	SECTION - I	Page No. 32, Sl. No. 18	6. Minimum Specification of CAT 6 24 Port Fully Loaded JACK PANEL / Patch Panel OEM should have Inventory of Green House Gas Emission verification certificate in accordance with ISO 14064-1: 2006. Certificate must be submitted along with the bid otherwise it may cause for rejection of bid.	6. Minimum Specification of CAT 6 24 Port Fully Loaded JACK PANEL / Patch Panel OEM should have Inventory of Green House Gas Emission verification certificate in accordance with ISO 14064-1: 2006 or equivalent. Certificate must be submitted along with the bid otherwise it may cause for rejection Of bid.
12	SECTION - I	Page No. 33, Sl. No. 2	Minimum Specification of CAT - 6 (1 Mtr.) Patch Cord The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA-568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair 100W Category 6 Cabling.	Minimum Specification of CAT - 6 (1 Mtr.) Patch Cord The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA- 568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair Category 6 Cabling.
13	SECTION - I	Page No. 34, Sl. No. 2	Minimum Specification of CAT 6 (2 Mtr.) Patch Cord. The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA- 568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission Performance	Minimum Specification of CAT 6 (2 Mtr.) Patch Cord. The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA- 568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission

			Chogifications for Ameir 100177	Dorformange Creatifications for A
			Specifications for 4 pair 100W Category 6 Cabling.	Performance Specifications for 4 pair Category 6 Cabling.
14	SECTION - I	Page No. 33, Sl. No. 11	Minimum Specification of CAT 6 Information Outlet (with Keystone, Back Box & Single Face & Single Port Face Plate) Jack Specification: Plastic Housing: Polycarbonate or equivalent, UL94V-2 rated or equivalent.	Minimum Specification of CAT 6 Information Outlet (with Keystone, Back Box & Single Face & Single Port Face Plate) Jack Specification: Plastic Housing: Polycarbonate or equivalent, UL94V-2 rated or better.
15	SECTION - I	Page No. 33, Sl. No. 6	Minimum Specification of CAT 6 Information Outlet (with Keystone, Back Box & Single Face & Single Port Face Plate) All information outlets for 100 W, 26 AWG copper cable shall:	Minimum Specification of CAT 6 Information Outlet (with Keystone, Back Box & Single Face & Single Port Face Plate) All information outlets for 26 AWG copper cable shall:
16	SECTION - H	Page No: 26, Sl. No. 11, 12		Quantity changed for supply and installation of CAT-6 cable.
17	SECTION - H	Page No. 26, Sl. No. 3		Quantity modified for 32 Inch or better 1920x1080 (full HD) Display Monitor.
18	SECTION - I	Page No. 30, Sl. No. 3	One D-Sub (No.15) Input for PC Input including for Audio	Not required
19	SECTION - I	Page No. 30, Sl. No. 4	One Component Video In with audio	Not required
20	SECTION - I	Page No. 29 & 30, Sl. No. 10	3. Minimum Specification of Display unit for VC system with HDMI Cable. Safety (CE, UL & amp; BIS, EMC-Class B)	3. Minimum Specification of 32 Inch LED Display unit for VC system with HDMI Cable. Safety (CE/ UL & amp/BIS / EMC-Class B)
21	SECTION - I	Page No. 29 & 30, Sl. No. 9	3. Minimum Specification of Display unit for VC system with HDMI Cable. Contrast Ratio (4700:1), Brightness 250 Nit	3. Minimum Specification of 32 Inch LED Display unit for VC system with HDMI Cable. Contrast Ratio (1100:1), Brightness 400 Nit or better.
22	SECTION - I	Page No. 29 & 30, Sl. No. 11	3. Minimum Specification of Display unit for VC system with HDMI Cable.	3. Minimum Specification of Display unit (for 32 inch) for VC system with HDMI Cable
23	SECTION - I	Page No. 30, Sl. No. 11	Duty Cycle (16x7)	Duty Cycle (24x7) 3. Minimum Specification of Display unit (32 inch and 43 inch both) for VC system with HDMI Cable. INCLUSION: OEM should have valid ISO 9001, ISO 14001 certification.

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				Copy of valid Certificate to be submitted and validity should remain upto completion of job.
24	SECTION - H	Page No. 26, Sl No. 4		MODIFIED BOM (INCLUSION OF 43 INCH DISPLAY UNIT)
			Minimum Specification of AIO DSP sound system with 2 nos wall mount Speaker and 2 numbers of wireless handled microphone	Minimum Specification of AIO DSP sound system with 2 nos wall mount Speaker and 3 numbers of wireless handheld microphone and one number lapel microphone.
25	SECTION - I	Page No. 30, Sl. No. 2	3 no. of wireless Microphones should be supplied (2 Hand held microphone with stand and 1x Lapel). Rechargeable battery will be supplied with wireless microphones. End customer will be responsible for charging the batteries as and when required.	4 nos. of wireless Microphones should be supplied (3 nos of Hand held microphone with stand and 1x Lapel). Rechargeable battery will be supplied with wireless microphones. End customer will be responsible for charging the batteries as and when required.
26	SECTION - I	Page No. 31, Sl. No. 15	Built-In 1 x Handheld, 1 x Lapel Microphone 2 channel receiver.	3 x Handheld, 1 x Lapel Microphone 2 channel receiver
27	SECTION - I	Page – 31, Sl. No. 41	The OEM should be Class 1 Supplier on GeM based on the Make in India Guidelines.	Not required for this tender.
28	SECTION - B	Page No. 7, Sl. No. 14	New Clause	Proposed OEM for all networking products should not have been filed for bankruptcy and should be profitable for at least last Three consecutive financial years. (FY 2020-21, 2021 - 22 & 2022 - 23) Financial year. Balance Sheet / CA Certificate must be submitted along with bid.
29	SECTION – B ELEGIBILITY CRITERIA	Page no. 7, Sl. No. 8	The bidder shall have Quality Certificate ISO 9001:2015, ISO 27001:2013 and ISO 14001:2015 Certified Company. (Related certificate copy required). Copy of valid Certificate to be submitted and validity should remain upto completion of job.	The bidder shall have Quality Certificate ISO 9001:2015, ISO 27001:2013 certified Company. (Related certificate copy required). Copy of valid Certificate to be submitted and validity should remain upto completion of job
30	SECTION - B ELEGIBILITY CRITERIA	Page No. 7, Sl. No. 10	The Bidder should have at least 100 employees on its payroll in India. The declaration in company's letter duly signed by HR department.	The Bidder should have at least 75 employees on its payroll in India. The declaration in company's letter duly signed by HR department.
31	SECTION - P	Page No. 42	MANUFACTURER'S AUTHORIZATION FORM	MANUFACTURER'S AUTHORIZATION FORM

			We also confirm that the material will be delivered within 20-24 weeks from the date of placement of confirmed order.	We also confirm that the material will be delivered within 12-16 weeks from the date of placement of confirmed order.	
32	SECTION – B ELIGIBILITY CRITERIA	Page No. 7, Sl. No. 6	The bidder should have an average annual turnover of not less than Rs.100 Crore each year in the last three financial years (considering FY – 2020-21, 2021-22, 2022-23. Bidder shall have to submit Audited Balance Sheet/Audited Accounts/Auditor Certificate in support of their claim.	The bidder should have an aggregate annual turnover of not less than Rs.200 Crore in the last three financial years (considering FY – 2020-21, 2021-22, and 2022-23. Bidder shall have to submit Audited Balance Sheet/Audited Accounts/Auditor Certificate in support of their claim.	
33	Revised Bill of Material (Section – H) is enclosed				
34	Revised Technical Specification Compliance Statement (Section – I) is enclosed.				
35	Revised Manufacturer's Authorization Form (Section – P) enclosed.				

SECTION – H

BILL OF MATERIAL

Sl. No.	Item description	Unit	Qty.
1	AIO (All-in-one Desktop computer), Intel Core i5, 12th Gen / 8GB / 512 GB SSD / Win 11 professional / 23.8"FHD / 3 years on-site comprehensive warranty / WiFi + BT enabled. Make: HP / Dell / Acer or equivalent	Nos.	804
2	600 / 650 / 750 VA Line Interactive UPS with 3 years on-site comprehensive warranty (Battery 2 years on-site comprehensive warranty), Make: APC / Numeric / Liebert or equivalent.	Nos.	1608
3	32 Inch or better 1920x1080 (full HD) Display Monitor, original wall mount Kit with three years on-site comprehensive warranty, Make: LG / Samsung or equivalent. (The quantity may change at the time of execution / ordering. Billing shall be on actual basis.)	Nos.	200
4	43 inches or more HD 4k Ultra-HD LED (3840 X 2160) Monitor Display Unit for VC System with HDMI cable (10 Mtr.) with three years on-site comprehensive warranty. Make: LG / Samsung or equivalent. (The quantity may change at the time of execution / ordering. Billing shall be on actual basis.)	Nos	604
5	AIO DSP sound system with 2 nos wall mount Speaker and 3 nos wireless handled microphone, 1 no Lapel. Make Peoplelink or equivalent.	Nos.	804
6	Supply of wall mounts 19" 6 U Rack with Power Strip, Cooling Fan, cable manager and accessories. All equipments housed properly, air circulation & properly locking system for Audio Systems Make: D-Link / Valrack or equivalent.	Nos.	804
7	Supply of 24 port patch panel loaded, Make : D Link or equivalent	Nos.	804
8	Optical Fibre HDMI Cable 15 Mtr or as per the site requirement	Nos.	804
9	USB Cable 10 Mtr. USB to USB	Nos.	804
10	Audio cable 30 Mtr.	Nos.	804
11	Microphone stand for wireless hand held microphone.	Nos.	1608
12	Supply of CAT-6 cable, Make: Legrand, R & M, Tyco, Comscope. D-Link or equivalent.	Mtr.	48240
13	Laying of CAT-6 UTP cable through PVC Conduit (including supply of 20mm PVC conduit, ISI grade / GI wire) with RJ-45 crimping, termination and establishing LAN connectivity.	Mtr.	48240
14	Supply of CAT-6 Single I/O with backbox, Face plate Make: Legrand, R & M, Tyco, Comscope, D-Link or equivalent	Nos.	1608
15	Supply of 1 Mtr. Patch Cord, Make: Legrand, R & M, Tyco, Comscope, D-Link or equivalent	Nos.	1608
16	Supply of 2 Mtr. Patch Cord, Make: Legrand, R & M, Tyco, Comscope, D-Link or equivalent	Nos.	1608

Bill of quantity may change at the time of ordering /execution of work. Final bill will be raised on actual consumption of all materials.

Detailed Technical Specifications are given in Section – I

SECTION – I

TECHNICAL SPECIFICATION COMPLIANCE STATEMENT

(Tender No. WTL/HC/VC/23-24/038)

1. Minimum Specification of Intel core i5 All in One Desktop Computer

Qty.	804 Nos.
Make	
Model	
Part No.	

SL no.	Specification	Description	Specification (Quoted / Applicable - By the Bidder	Complied (Yes / No)
1	Category	Business (for work) segment (Not home segment)		
2	Form factor	All in One		
3	Make, Model / part No.	(to be given by the bidder - exactly and in specific)		
	Processor	& Motherboard		
4	Processor Family	Intel core i5 Processor with 12th Generation		
5	Base Frequency	2.5 GHz or more		
6	Processor Cache	18 MB or more L3 cache		
7	Motherboard	Intel original Motherboard or Equivalent performance chippset motherboard		
8	TDP (Thermal Design Power)	not more than 65W		
	Memory a	and Disk Storage		
9	System Memory (RAM)	8 GB DDR4 with one unused slot		
10	Expandable Memory	Upto 64 GB , atleast 2 slots		
11	Hard Disk	Integrated Dual Port SATA III Controller, SSD 512 GB M.2 NVMe		
	Platform	/ Architecture		
12	Preloaded Operating System	Win 11 professional and compatible with Ubuntu 20.04 required		
13	Operating System Certification	Win 11 professional certification. Manufacturers (OEM) that the offered systems are compatible with the latest versions of Ubuntu Linux 20.04 and Win 11 professional certifications. Confirmation is required in OEM's letterhead that the offered systems are compatible with the latest versions of Ubuntu Linux 20.04		
14	System Architecture	64 - Bit		
	Displa	y & Graphics		
15	Screen Size & Resolution	Non-touch 23.8 inch or higher, FHD or higher Resolution or better with relevant TCO Certification		

16	Screen Type	HD Wide Screen Backlit LED Anti - Glare Display			
17	Graphic Processor	Intel HD or equivalent integrated HD Graphics as per the Processor			
18	Monitor Mounting Support	Wall / Cart / Arm Mountable through VESA bracket			
19	Display resolution (PIXELS)	1920 x 1080 or higher			
20	Availability of web cam integrated with display	Yes (5 MP Camera or higher)			
21	Resolution of webcam	FHD or higher			
22	Inbuilt microphone	YES			
23	Availability of speakers integrated with	YES			
24	Number of Speakers available	2 or higher			
		Input			
25	Web Camera	5.0 Megapixel HD Built in Webcam			
26	pointer Device & Keyboard	OEM USB Optical Scrolling Mouse, OEM USB Standard 104 keys keyboard			
		Audio			
27	Microphone	Digital Microphone			
28	Speakers	Stereo Sound Speakers (Built -in)			
	Com	munication			
29	Ethernet	Integrated Gigabit Ethernet (IPv6			
49	Ethernet	complaint)			
30	Wireless	IEEE 802.11 b/g/n or higher			
31	Bluetooth Connectivity	Yes (5.0 of Higher)			
	Po	rts / Slots			
32	USB Port	4 x USB 2.0, 2 x USB 3.0			
33	Other Ports	Mic In, Speaker out, RJ45, VGA/HDMI/Display Port Out			
	Power Supply & Energy l	Efficiency (Green Compliance)			
34	Power Supply / Adaptor	Internal / External power A.C. Adaptor			
35	Energy Certification	Energy Star (EPA) ver 5.0 or later / BEE India Star ver 1 or later			
36	Power Management	ACPI complaint			
	Secu	rity feature			
37	USB Ports Security	USB Port Disable (through BIOS)			
	Other	Specification			
38	Hardware Drivers	Vendor to provide drivers for			
		Ubuntu - Linux 20.04 LTS Original Equipment Manufacturer			
	05	(OEM) Manufacturer or its			
39	OEM Product	authorised distributor/ dealers			
	with OEM				
	Warranty &	k Service Support			
		3 years on site Comprehensive warranty support with L1 support			
40	Warranty	from bidder and L2 Support from OEM			

		Must have/ preferred Company	
41	Service Center	Authorised Service Centre in	
		Capital City / High Court place	

2. Minimum specification of Line Interactive UPS system with 15-20 minutes battery backup read as:

Specification for 600 VA / 650 VA / 750 VA line interactive UPS (108VAH) with 15-30 mins Battery Backup on full load

Qty.	1608 Nos.		
Make			
Model			
Part No.			
	Minimum Specification	Specification (Quoted / Applicable - By the	Complied
Specification	Description	Bidder)	(Yes / No)
Capacity	VA/W		
Capacity	VA/W		
INPUT	Voltage		
	Voltage Range		
	Frequency Range		
OUTPUT	AC Voltage Regulation (Batt. Mode)		
	Frequency Range (Batt. Mode)		
	Frequency Range (Batt. Mode)		
	Waveform (Batt. Mode)		
	Overload		
BATTERY	Battery Type & Number		
TRANSFER TIME			
TIGHIST LICTIME			
	Typical Recharge Time		
	Minimum line break for transfer		
INDICATORS	to battery		
	AC Mode		
	Battery Mode		
	Fault		
ALARMS	Battery Mode, Low		
AllAKWIS	Battery, Overload, Battery replacement, fault		
PROTECTION	Full Protection		
PHYSICAL	Dimension, D X W X H (mm)		
	Net Weight (kgs)		
	Material		
ENVIRONMENT	Operating Environment		
	Storage Temp		
	Humidity		
	Noise Level		
l			

Test Reports	BIS registration
	NABL Approved government lab test report.
Warranty	UPS 3 years onsite
	comprehensive, battery 2 years
	onsite comprehensive

3.Minimum Specification of Display unit (32 Inch) for VC system with HDMI Cable

Qty.	200 Nos.
Make	
Model	
Part No.	

S1.	Minimum Specification		Complied
No.	Description	Applicable - By the Bidder)	(Yes / No)
1	32 or more inches HD LED (1920 x 1080) Monitor, viewing angle (H/V)-1780/1780, Aspect Ratio- 16:9, RJ45, Wifi 5, Bluetooth supported compatible with VC system.		
2	Two or more HDMI In Ports with 15 meters HDMI Cable		
3	Built In Stereo Speakers with Amplifier with 10 W x 10 W capacity		
4	Tablet Top Stand / Wall Mount Kit		
5	Remote Control with Display Unit Functionalities		
6	Input Power 230+/- 5% with 60 Hz		
7	Contrast Ratio (1100:1), Brightness 250 Nit		
8	Safety (CE/UL & amp/BIS, EMC-Class B)		
9	Duty Cycle (24 x 7)		
10	3 years onsite comprehensive warranty		
11	OEM should have valid ISO 9001, ISO 14001 certification. Copy of valid Certificate to be submitted and validity should remain upto completion of job		

4. Minimum Specification of AIO DSP sound system with 2 nos wall mount Speaker and 2 numbers of wireless handled microphone

Qty.	804 Nos.
Make	
Model	
Part No.	

Sl.No	Specifications	Specification (Quoted / Applicable - By the Bidder)	Complied (Yes / No)
	Wireless Microphone with receiver		
1	It should comes with wireless microphone receiver with 2x		

	antenna ports	
	4 no. of wireless Microphones should be supplied (3 Hand held	
•	microphone with stand and 1x Lapel). Rechargeable battery will	
2	be supplied with wireless microphones. End customer will be	
	responsible for charging the batteries as and when required.	
3	Microphone Frequency Response- 80Hz~18KHz or better	
	The system should have the facility to control the gain of	
4	microphone.	
5	The system should have LED indicator for status.	
6	Operating Range upto 100 Feet	
	Digital Signal Processor	
7	The DSP should have a 100% Full Duplex Echo Cancelling – no	
	attenuation during full-duplex.	
8	The system should have Automatic echo cancellation(AEC).	
9	The system should have Automatic Gain Control (AGC).	
10	The system should have Dynamic Noise reduction.	
11	The should have frequency response between 20 Hz – 20 KHz	
12	The DSP should have USB port for integrating with Unified	
	Software solutions like Skype, Lync, etc.	
	DSP Should have dual capability of Local Sound Reinforcement	
	and Far end Audio to be sent for Video conferencing at the same time without any Noise and Echo. Whatever teacher or	
	student speaks through Collar or hand held microphone and	
13	Gooseneck microphone(Optional) all should be Going to Far	
	end Location over Video Conference and also should come out	
	of Speakers for local Sound Reinforcement so that everyone	
	present in class can also hear clearly.	
	Balanced 48v/12v phantom mic inputs (1x Phoenix ports) with	
14	separate gain controller	
15	3 x Handheld, 1 x Lapel Microphone 2 channel receiver	
16	It should have 1 X RS232 port for controlling	
	Amplifier	
17	The system having inbuilt digital class D-amplifier.	
10	The Amplifier should consist of a 100 Watts (50 WattsX2) at 8	
18	Ohms or more	
19	The Amplifier should have S/N Ratio of >80dB.	
20	Built-In 2 x Handheld, 1 x Lapel Microphone 2 channel receiver	
21	Unbalanced MIC input (1x 6.5mm phono jack) with gain control	
22	Line input - 1 x 2RCA or XLR or better	
23	Line Output - 1 x 2RCA or XLR or better	
24	2x SpPheoniex Speaker Out	
25	The product should be one integrated device with Microphone	
45	receiver,Digital Signal Processor and amplifier	
	Speakers	
26	The system should be made of ABS Plastic	
27	The system should be have polyprepelene cone woofer	
28	The system should be have woofer size of 5.25" or higher	
29	The system should be have Titanium dome type Tweeter	
30	The system should be have Tweeter size of 1" or higher	
31	It should be frequency bandwidth- 90 – 20 kHz	
32	It should have impedance of 8 ohms or higher	
33	It should have SPL of 90dB or higher	
34	It should have 50 watts or higher Power (RMS)	
35	It should have 1 (one) pair metal binding terminal type	
	connectors	
36	It should be wall-mounting or higher	
37	It can be mounted vertically or horizontally in both axis	

38	Proposed product must have CE, RoHS, FCC certification. Copy to be attached as proof.	
39	The OEM must have valid ISO 9001:2015, ISO 27001:2013 and ISO 14001:2015 Certified Company. (Related certificate copy required).	
40	OEM should have established office in India from more than 10 Years. (Valid Certificate of incorporation required).	
41	The OEM should have at least 200+ employees on its payroll in India. This is to justify that OEM has made investment in India and is serious about its business in India which will ensure long term after sales support and spare support from the OEM	
42	Warranty support of total DSP sound system with 2 nos wall mount Speaker and 4 numbers of wireless handled microphone	
43	3 years on-site comprehensive warranty support by SI / OEM	

5. Minimum Specification of 19" 6U Wall mounting Rack

Qty.	804 Nos.
Make	
Model	
Part No.	

Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
	(Quoted / Applicable – by the

6. Minimum Specification of CAT 6 24 Port Fully Loaded JACK PANEL / Patch Panel

Qty.	804 Nos.	
Make		
Model		
Part No.		

S1. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied(Yes / No)
1	24-port, 1U, Unshielded Twisted Pair, Category 6, ANSI/ TIA 568-C.2 and ISO/IEC 11801		
2	Port identification numbers on the front of the panel		
3	IDC: Suitablefor26 AWG stranded and solid wire compatible with both 110 & Krone punch down tools.		
4	Integrated cable management for cable entry on each port.		
	Jack Connector Specification:		
5	Plastic Housing: PBT + Glass Fiber, UL94V-0 rated		
6	Contact Material: Copper Alloy		
7	Contact Plating: 50µ" Gold plated on plug contact area		
8	Plug Retention Force: 15 lb.		

	IDC Connector Specification:	
9	Plastic Housing: Polycarbonate, UL94V-0 rated or	
	equivalent	
10	Contact Material: Copper Alloy	
11	Wire Accommodation: 26 AWG solid	
12	Termination Pattern: T568 A and B;	
13	Brand and company together presence in India should be	
	for last 10 years.	
14	Manufacturing: Shall have ISO9001:2015 &14001 certified ,	
14	ISO 45001 manufacturing facility in India.	
16	ROHS / ELV Compliant	
17	Allow for a minimum of 200 re-terminations without signal	
11	degradation below standards compliance limit.	
	OEM should have Inventory of Green House Gas Emission	
18	verification certificate in accordance with ISO 14064-1: 2006	
10	or equivalent. Certificate must be submitted along with the	
	bid otherwise it may cause for rejection Of bid.	
	OEM should have Average Annual Financial Turnover not	
19	less than 500 Crores for their business in India for each of	
	the last three financial years for data networking products.	

7. Minimum Specification of CAT 6 Information Outlet (with Keystone, Back Box & Single Face & Single Port Face Plate)

Qty.	1608 Nos.
Make:	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	Single Port		
2	Write on labels in transparent plastic window – supplied with plate		
3	Face Plate with shutter		
4	Should be able to support variety of jacks – UTP		
5	Category 6, TIA568 C.2-1 – 250MHz		
6	All information outlets for 26 AWG copper cable shall:		
7	Shutter is on face plate		
8	Insertion force: 50N for 60+/- 5 Sec		
9	Information outlet (RJ45 jack) should be covered under UL listed / ETL verified		
	Jack Specification:		
11	Plastic Housing: Polycarbonate or equivalent, UL94V-2 rated or better		
12	Operating Life: Minimum 750 insertion cycles		
13	Contact Material: Copper alloy		
14	Contact Plating: 50 µinches gold on plug contact area		
15	OEM should be ISO9001 and ISO14001 certified for design, ISO 45001 development for LAN & WAN products.		
16	Brand and company together presence in India should be for last 10 years.		
17	Keystone Jack, Faceplate should be from same OEM		

8. Minimum Specification of CAT - 6 (1 Mtr.) Patch Cord

Qty.	1608 Nos.
Make:	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	Category 6 UTP Patch Cord – 1 mtr		
2	The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA- 568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair Category 6 Cabling.		
3	Conductor size: 24 AWG, stranded copper conductors 100 Ohm		
4	Factory fitted Strain relief boots on either side, Cable OD: 6 mm		
5	Contact blade: Copper Alloy		
6	Contact plating: 50µ" Gold		
7	OEM should be ISO9001 and ISO14001 certified for design, ISO 45001 development for LAN & WAN products.		
8	Brand and company together presence in India should be for last 10 years.		
9	Factory Crimped Patch Cord with Factory Moulded Boot		
10	OEM should have Inventory of Green House Gas Emission verification certificate in accordance with ISO 14064-1: 2006. Certificate must be submitted along with the bid otherwise it may cause for rejection of bid.		
11	OEM should have Average Annual Financial Turnover not less than 500 Crores for their business in India for each of the last three financial years for data networking products.		

9. Minimum Specification of CAT 6 (2 Mtr.) Patch Cord

Qty.	1608 Nos.
Make:	
Model	
Part No.	

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	Category 6 UTP Patch Cord – 2 mtr		
2	The Patch Cord shall at a minimum comply with proposed ANSI / TIA / EIA- 568-C.2-1 & ISO/IEC 11801 Commercial Building Cabling Standards Transmission Performance Specifications for 4 pair Category 6 Cabling.		
3	Conductor size: 24 AWG, stranded copper conductors 100 Ohm		
4	Factory fitted Strain relief boots on either side , Cable OD : 6 mm		
5	Contact blade: Copper Alloy		
6	Contact plating: 50µ" Gold		

7	OEM should be ISO9001 and ISO14001 certified for design,	
	ISO 45001 development for LAN & WAN products.	
8	Brand and company together presence in India should be	
0	for last 10 years.	
9	Factory Crimped Patch Cord with Factory Moulded Boot	
	OEM should have Inventory of Green House Gas Emission	
1.0	verification certificate in accordance with ISO 14064-1:	
10	2006. Certificate must be submitted along with the bid	
	otherwise it may cause for rejection of bid.	
11	OEM should have Average Annual Financial Turnover not	
	less than 500 Crores for their business in India for each of	
	the last three financial years for data networking products.	

10. Minimum Specification of CAT 6 UTP Cable

Qty.	48240 Mtr.
Make:	
Model	
Part No.	

S1. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	Unshielded Twisted Pair, Category 6, ANSI / TIA568C.2&ISO/IEC11801 Class E or better		
2	23 AWG Solid bare copper		
3	Cross-member (+) Separator		
4	Performance spec minimum 500 MHz shall be certified by Intertek for 4 connector channel compliance as per ANSI/TIA 568-C.2 or latest for CAT-6. (Third party certificate should be provided along with the bid.)		
5	ROHS Compliant		
6	All Copper components must be from same OEM.		
7	The 4 pair Unshielded Twisted Pair cable shall be UL Listed, ETL verified		
8	Construction: 4 twisted pairs separated by internal X shaped, 4 channel, full separator. Half shall not be accepted.		
9	Insulation: High density polyethylene		
10	Pairing: Two insulated conductor twisted together		
11	No. of Pair: 4 pairs		
12	Color of sheath: LSZH GREY- Single sheath, LSZH Sheath with IEC standard 3rd party certification / Reports.		
13	Rip Cord should be available		
14	Sequential meter marking should be available		
15	Temperature Rating: (- 20 to +60 degree C)		
16	Packing: 305 Mtrs.		
17	OEM should have Inventory of Green House Gas Emission verification certificate in accordance with ISO 14064-1: 2006 or equivalent. Certificate must be submitted along with the bid otherwise it may cause for rejection of bid.		
18	OEM should have secure product development lifecycle process requirement certification in accordance with IEC 62443-4-1: 2018 standard. Certificate must be submitted along with the bid otherwise it may cause for rejection of bid.		
19	Low Frequency Electrical Parameter		
20	Conductor Resistance: ≤9.38 OHMS or better / 100 MTR or better.		
21	Resistance Unbalance: 5% Max		

22	Mutual Capacitance: < 5.6 nF/100 mtrs	
23	Capacitance Unbalance: 330pF/100M	
24	Delay Skew: < 45ns	
	OEM should have valid ISO 9001, ISO 14001 & ISO	
25	45001:2018 certified for design and development of LAN and	
23	WAN products, all the relevant certificates must be	
	submitted along with the bid.	

11. Minimum Specification of 43 inch Display unit for VC system with HDMI Cable

Qty.	604 Nos. (The quantity may change at the time of execution / ordering. Billing shall be on actual	
	basis)	
Make:		
Model		
Part No.		

Sl. No.	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	43 or more inches 4k Ultra-HD LED (3840 X 2160) Monitor, Viewing Angle (H/V) - 1780/1780, Aspect Ratio - 16:9, RJ45, WiFi 5, Bluetooth supported compatible with VC System.		
2	Two or more HDMI In Ports with 10 meters HDMI Cable		
3	Built In Stereo Speakers with Amplifier with 10 W x 10 W capacity		
4	Table Top Stand / Wall Mount Kit		
5	Remote Control with Display Unit Functionalities		
6	Input Power 230+/- 5% with 60 Hz		
7	Safety (CE / UL & amp / BIS / EMC - Class B		
8	Duty Cycle (16 x 7)		
9	3 years onsite comprehensive warranty		
10	OEM should have valid ISO 9001, ISO 14001 certification. Copy of valid Certificate to be submitted and validity should remain upto completion of job.		

Authorized Signatory (Signature In full):
NT 1.414 COL
Name and title of Signatory:
tamp of the Company: