<u>CORRIGENDUM – VI</u>

TENDER NO. WTL/WB-CCW/SG/CRE/23-24/074 dated 28.2.2024

Sl.	Section	Clause No. /	Page No.	Existing Description	To be Read As
No		Name			
1.	Section – H	Bill of Material	Corrigendum – IV	Bill of Material for Police Commissionerates and Police Districts	Modified. Revised Section – H enclosed
2.	Section – I	Technical Specifications	Corrigendum – IV	Technical Specification Compliance Statement for Police Commissionerates and Police Districts	Modified. Revised Section – I enclosed

<u>SECTION – H (Revised)</u>

<u>Supply, Installation and Commissioning of Control Room Equipment in six Police Commissionerates and 28</u> <u>Police Districts under State Grid Project of West Bengal Police</u>

<u>Sl. No</u>	Item Description	<u>Qty</u>	<u>Unit</u>
<u>E</u> :	kisting CCTV Camera Surveillance For Police Commissionerates (Approx	200 Cam	eras)
1.	32 Channel NVR	108	Nos
2.	55''LED TV	108	Nos
3.	24 Port L2 Managed Switch	<u>24</u>	Nos
4.	24 Port SFP Switch	12	Nos
5.	Media Converter	<u>6</u>	Nos
6.	20Km SFP Module	6	Nos
7.	80Km SFP Module	6	Nos
8.	PON Module	6	Nos
9.	4 Port OLT	6	Nos
10.	ONU	6	Nos
11.	CAT6 Cable	6	Nos
12.	HDMI Cable	6	Nos
13.	Extension USB Cable	6	<u>Nos</u>
14.	27u Network Rack	6	Nos
15.	Wireless Keyboard Mouse	6	Nos
16.	UPS	6	Nos
	Media Monitoring		
17.	43'' LED TV	<u>24</u>	Nos
	Official Work		
18.	Desktop	<u>12</u>	Nos
19.	22" LED Monitor	<u>12</u>	Nos
20.	All in one Printer	6	Nos
21.	Antivirus	6	Nos
	SIP based IPBEX		
22.	16 Channel IPBEX	<u>6</u>	<u>Nos</u>
23.	Telephone IP Phone Receiver	<u>60</u>	<u>Nos</u>
	Security System		
24.	CCTV camera with audio	<u>12</u>	<u>Nos</u>
25.	Biometric Attendance Control	<u>6</u>	<u>Nos</u>
26.	P 1.5 video wall (8 x 12)ft with one processor	6	Nos

BILL OF MATERIAL

All items should be minimum 3 years onsite warranty Bill of quantity may change at the time of ordering of purchase Order. Details Technical Specification are given in Section-I.

WEBEL TECHNOLOGY LIMITED SECTION-H BILL OF MATERIAL

<u>Sl. No</u>	Item Description	<u>Qty</u>	<u>Unit</u>			
	Existing CCTV Camera Surveillance for Police Districts (Approx 600 Cameras)					
1.	32 Channel NVR	<u>196</u>	<u>Nos</u>			
2.	55''LED TV	<u>196</u>	Nos			
3.	24 Port L2 Managed Switch	<u>56</u>	Nos			
4.	24 Port SFP Switch	<u>28</u>	Nos			
5.	Media Converter	<u>28</u>	Nos			
6.	20Km SFP Module	<u>28</u>	Nos			
7.	80Km SFP Module	<u>28</u>	<u>Nos</u>			
8.	PON Module	<u>28</u>	Nos			
9.	4 Port OLT	<u>28</u>	<u>Nos</u>			
10.	ONU	<u>28</u>	Nos			
11.	CAT6 Cable	<u>28</u>	Nos			

-			1	
12.	HDMI Cable	<u>28</u>	<u>Nos</u>	
13.	Extension USB Cable	<u>28</u>	Nos	
14.	27u Network Rack	28	Nos	
15.	Wireless Keyboard Mouse	<u>28</u>	Nos	
16.	UPS	<u>28</u>	Nos	
	<u>Media Monitoring</u>			
17.	43'' LED TV	<u>112</u>	Nos	
	Official Work			
18.	Desktop	<u>56</u>	Nos	
19.	22" LED Monitor	<u>56</u>	Nos	
20.	20. All in one Printer		Nos	
21.	21. Antivirus			
	SIP based IPBEX			
22.	16 Channel IPBEX	<u>28</u>	Nos	
23.	Telephone IP Phone Receiver	<u>280</u>	Nos	
	Security System			
24.	CCTV camera with audio	<u>56</u>	Nos	
25.	Biometric Attendance Control	<u>28</u>	Nos	

All items should be minimum 3 years onsite warranty Bill of quantity may change at the time of ordering of purchase Order. Details Technical Specification are given in Section-I.

<u> SECTION – I (Revised)</u>

SECTION- 1 Technical Specification Compliance Statement for Police

Commissionerates

Minimum Specification of 32 Channel NVR

Qty.	108 Nos.
Make	
Model	
Part No	

SL No.	Parameters	Value	Specification (Quoted / Applicable – by the bidder)	Compliance (Yes/ No)
1	Type of Recording Device*	NVR		
2	IP Camera Support*	Yes		
3	PTZ Camera Support*	Yes		
4	Capability of Recorder to Work with Other Makes of CCTV Cameras (ONVIF support)*	Yes		
5	Number of IP Camera supported in Recorder	32		
6	Camera Supported	12MP or Better		
7	Supported Compression Technique*	H.265 & H.264		
8	Maximum Number of cameras to be viewed on a single display*	32		
9	Total number of simultaneous local views	1 or Better		
10	Simultaneous Monitoring Connections for Cameras (Users in Local Network for Client Connection)*	l or Better		
11	Min. Through put (Mbps)*	256 Mbps		
12	Audio Support*	Yes		
13	Two-way Audio Support*	Yes		
14	Type of Encryption*	HTTPS & WATER MARKING		
15	Alarm Input*	12		
16	Alarm Output*	4		
17	Supported Network Protocols*	As per site requirement		
18	Supported Interface*	Ethernet ,HDMI, VGA,USB,RS 232, RS485		
19	Number of Ethernet Ports*	2		
20	Number of HDMI Ports*	1		
21	Number of VGA Ports*	1		
22	Number of USB Ports*	2		

-			
23	Slient feature Supported	Remote Adminstration, OTA update,PC Client, Web Client	
24	Recording schedule support*	Yes along with MD/Alarm based,/Event based /Analytic based	
25	Bandwidth Control*	Constant Bit Rate (CBR), Variable Bit Rate (VBR)	
26	Camera Notification*	POP up Window on Event, E- mail SNAP SHOT	
27	Search*	Date, Time, Event, Log, Motion, Bookmarks, Full Screen, Next Camera, Previous Camera, Repeat	
28	IVS by NVR	Face detection; face recognition; perimeter protection	
29	Camera*	Add, Edit, Delete	
30	Number of Hard Disk Slots	4	
31	Storage Capacity of each HDD slot	10	
32	Power Input*	12V DC/100 V-240 V AC	
33	Minimum Operating Temperature*	-10	
34	Maximum Operating Temperature*	50	
35	Relative Humidity Non Condensing at 40 deg C*	90	
36	Warranty*	2	
37	BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest*	Yes	
38	Certifications	FCC, UL, CE, RoHS, BIS	

OEM Pre-qualification criteria for NVR and CCTV

Criteria	Supporting Document
The OEM of component such as IP Camera, Storage, NVR/ VMS Software and Network Switches should not be blacklisted or banned or barred by any government agency in any country. The OEM Should not be charged or prosecuted for any cheating or fraudulent case(s) in India for their respective product line.	Declaration of OEM on Letterhead
The OEM of CCTV Camera should be a fulltime member of ONVIF and quoted models should be listed on official website of ONVIF. The CCTV OEM should not be suspended/ blacklisted by ONVIF.	OEM declaration on Letterhead supported by valid certificates (valid as on technical bid opening date) / reference documents.
The OEM of CCTV component should be CMMI Level 5 or above certification.	
The OEM of CCTV component should have General Data Protection Regulation (GDPR) certification.	
The OEM of CCTV component should have ISO Certifications for Quality, Environment, Security management, Health & Safety Management system, etc. for manufacturing of all types of Cameras, NVR/ DVR and allied component.	The Bidder/s shall attach the copy of the OEM's ISO Certificate along with the bid.
- ISO 9001:2015 - ISO 14001:2015 - ISO 27001:2013 - ISO 45001:2018 - ISO 27032:2012	
	The OEM of component such as IP Camera, Storage, NVR/ VMS Software and Network Switches should not be blacklisted or banned or barred by any government agency in any country. The OEM Should not be charged or prosecuted for any cheating or fraudulent case(s) in India for their respective product line. The OEM of CCTV Camera should be a fulltime member of ONVIF and quoted models should be listed on official website of ONVIF. The CCTV OEM should not be suspended/ blacklisted by ONVIF. The OEM of CCTV component should be CMMI Level 5 or above certification. The OEM of CCTV component should have General Data Protection Regulation (GDPR) certification. The OEM of CCTV component should have ISO Certifications for Quality, Environment, Security management, Health & Safety Management system, etc. for manufacturing of all types of Cameras, NVR/ DVR and allied component. - ISO 9001:2015 - ISO 14001:2015 - ISO 27001:2013 - ISO 45001:2018

6.	All the CCTV Component such as Camera, VMS, NVR, DVR, etc should be from same OEM for seamless integration and ease of operation. All CCTV cameras offered in this tender should be UL, CE, FCC, RoHS and BIS certified.	Declaration of OEM on Letterhead along the copies of certificates.
7.	The OEM should have average Annual turnover of INR 100 Crores during the last 3 Financial Year ending 31st March 2021.	Audited balance sheet form statutory auditor
8.	The OEM of CCTV component should have its office and service/ support centre in Kolkata	Certificate of office establishment, statutory tax registration certificates such as Trade license, GST registration certificate, etc. to be provided.
9.	The camera OEM should be a genuine manufacturer and should have offical valid H.265 HEVC certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the licenced fee for using the genuine HEVC compression legally. The same will be cheked on following official website. <u>https://www</u> . mpegla.com/programs/hevc/licensees/	Declaration of OEM on Letterhead

SECTION- 2 Technical Specification Compliance Statement

Minimum Specification of 55 inch LED TV

Qty.	108 Nos.
Make	
Model	
Part No	

\$1. No.	Section	Parameters	Features	Specification (Quoted / Applicable – by the bidder)	Complied (Yes/ No)
1		Screen Size	55" or higher		
2		Panel Technology	IPS or VA		
3		Aspect Ratio	16:09		
4		Native Resolution	3,840 x 2,160 (UHD)		
5		Backlight Unit Type	Edge		
6	Panel	Brightness (cd/m2)	500nit or higher		
7	Panel	Dynamic Contrast Ratio	10,00,000:1 or higher		
8		Viewing Angle (H x V)	178 x 178 or higher		
9		Response Time	8ms(G to G) or better		
10		Surface Treatment (Haze)	Haze 28% or better		
11		Operation Hours	24x7 Hrs		
12		Orientation	Landscape & Portrait		
13		Input	HDMI (3), DP, Audio, USB (2)		
14	Connectivity	Output	HDMI, Audio		
15		External Control	RS232C In/out, RJ45 (LAN) In, IR In		
16	Mechanical	Bezel Color	Black		
17	Specification	VESA	300 x 300 or as per OEM		
18	Key Feature	Internal Memory 16 GB, Built-in Sensor, Auto Brightness sensor, Sensor, Local Key Operation, E Contents Scheduling, Group Ma Fail over, Background Image (B Signal Image), Sync Mode (RS-2 Sync), Multi-screen (PIP, PBP (4			

		Tag (4), Play via URL, Rotation (Screen Rotation, External Input Rotation), Gapless Playback, Tile Mode Setting (Max. 15 × 15), Setting Data Cloning, SNMP, ISM Method, Auto Set ID, Status Mailing, Control Manager, 3rd Party Compatibility (Crestron Connected), Power (Smart Energy Saving, PM mode, Wake on LAN, Network Ready), Beacon, HDMI-CEC, SI Server Setting, webRTC		
19	Environmental	Operation Temperature	0°C to 40°C	
20	Conditions	Operation Humidity	10% to 80%	
21		Power Supply	100-240V~, 50/60Hz	
22	Power	Power Type	Built-In Power	
23	10001	Consumption: Smart Enegy Saving / Max.	130W / 180W	
24	Software	Content Management Software	SuperSign CMS	
25	Compatibility	Control and Monitoring Software	SuperSign Control / Control+	
26		Safety	CB/NRTL	
27	Certification	EMC	FCC Class "B" / CE / KC	
28		ErP / Energy Star	Yes / Yes	
29	Special	IP Rating	IP5x	
30	Feature	Warranty	3 Years	
31				

SECTION- 3 Technical Specification Compliance Statement Minimum Specification of 24 Port L2 Managed Switch

Qty.	24 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer-2 Fully Managed Stackable Switch having 24 x 10/100/1000 baseT ports with 2x 10GBASE-T ports & 4x 10G SFP+ slots		
Switching Capacity should be atleast 168Gbps		
Packet Forwarding Rate should be atleast 125Mpps for 64-byte packet size		
The switch should have non-blocking architecture & wire-speed performance under fully loaded condition from day one		
The switch should have smart fans with sensor IC that provides different fan speed based on different temperature.		
The switch should have support for physical stacking with atleast 8 units per stack.		
The switch should have support for virtual stacking with atleast 25 units per stack.		
The Switch should have support for reduandant power supply.		
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		
The Switch should have following L2 features from day one		
1. MAC Address Table size: Atleast 16000		

2. Flow Control: IEEE 802.3x in full duplex, back pressure in half	
duplex & HoL blocking prevention	
3. Jumbo Frame Support (Atleast 9K bytes)	
4. IGMP v1 v2 v3 snooping with atleast 1024 IGMP snooping groups, Per VLAN IGMP Snooping, host based IGMP snooping fast leave	
5. MLD v1 v2 snooping with atleast 1024 MLD snooping groups, Per VLAN MLD Snooping, host based MLD fast leave	
6. IEEE802.1D STP, 802.1w RSTP,802.1s MSTP with atleast 16 MSTP	
instances, Root guard or equivalent feature. G.8032 ERPS features.	
7. The switch should be able to avoid the loop occuring in a single port connected to an unmanaged switch/hub by shutting down the	
corresponding port or corresponding VLAN	
8. IEEE 802.3ad & IEEE 802.1AX Link Aggregation with atleast 8 ports	
per groups & 32 groups per switch.	
9. Port mirroring & VLAN mirroring for Tx/Rx/Both. One-to-One	
mode, Many-to-one mode, Flow based mirroring.	
10. IEEE 802.1Q VLAN, atleast 4000 Static VLANs, 4000 Dynamic VLANs Groups, GVRP, VoiceVLAN, asymmetric VLAN, 802.1v	
protocol VLAN, MAC based VLAN, Private VLAN.	
The switch should have 802.1p support with 8 queues per port.	
Support strict, WRR queue handling technique. trTCM, srTCM.	
The switch should support CoS based on VLAN, IP address, MAC	
address, DSCP, TCP/UDP port number, 802.1p priority queues, user	
defined packet content, IPv6 address The switch should have Port-based ingress & egress bandwidth	
control with minimum granularity of atleast 8Kbps. Flow-based	
ingress & egress bandwidth control with minimum granularity of	
atleast 8Kbps	
The switch should have support for standard & extended Access	
control lists based on VLAN ID, 802.1p priority, MAC address, IP Address, DSCP, TCP/UDP port number, user defined packet content,	
IPv6 address. Time based ACL.	
The switch should have the following security features from day one:	
SSHv2 for IPv4 & v6, Broadcast/Multicast & Unicast storm control, port	
security feature with atleast 64 MAC per port, traffic segmentation,	
ARP spoofing prevention, IEEE 802.1x port based authentication, authentication database failover, DHCP server screening, DAI	
(Dynamic ARP Inspection), BPDU attack protection, DoS attack	
prevention, Binding of IP address & MAC address with physical port.	
Web based Access Control, MAC based Access Control, Dynamic	
VLAN assignment, Guest VLAN, RADIUS & TACACS+. Atleast four	
level of user account control. The switch should have feature to protect the CPU from protocol	
control packet attack.	
The switch should have feature of atleast 512 static routes, default	
root, RIPv1v2, RIPng, OSPF, Policy Based Routing, at least 128nos. Of	
IP interfaces, IPv6 Neighbor Discovery, VRRP, policy based route from first day	
The Switch should have following Management features from day	
one: Web-based GUI, CLI, Telnet Server, TFTP Client, SFTP server,	
SNMPv1v2cv3, SNMP trap, BooTP/DHCP Client, SNTP, NTP, debug	
command, RMONv1, RMONv2, Syslog, ICMPv6, DHCP server, DHCP	
Relay Option 60,61,61,125, LLDP, LLDP-MED, Multiple Image support, sflow, trusted host, Physical console port for Out of band	
management.	
OEM should have valid ISO 9001, ISO 14001 & ISO 45001:2018	
certified for design and development of LAN and WAN products, all	
the relevant certificates must be submitted along with the bid.	
OEM Brand and company together presence in India should must be	
for last 20 years and OEM should have a registered office in India, from date of RFP publication.	
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.	

The OEM should have their Own service centre running & operational within the state of installation (West Bengal) with minimum manpower of 5 personals for at least last five years. Documentary evidence must be submitted along with the bid.	
The OEM must not be blacklisted or banned by any State/Central Government, Semi Government or PSU and any other GOVT. organization in INDIA and Globally.	
OEM offered must be in steady and profitable business in India at- least for each of the last 10 Financial years (FY 2012-13 to 2021-22). Bidder shall have to submit audited Balance Sheet in support of their claim.	

SECTION-4

Technical Specification Compliance Statement Minimum Specification of 24 Port SFP Switch

Qty.	12 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer-2 Fully Managed Stackable Switch having 24x 1G SFP slots with $2x$ 10GBASE-T ports & $4x$ 10G SFP+ slots		
Switching Capacity should be atleast 168Gbps		
Packet Forwarding Rate should be atleast 125Mpps for 64-byte packet size		
The switch should have non-blocking architecture & wire-speed performance under fully loaded condition from day one		
The switch should have smart fans with sensor IC that provides different fan speed based on different temperature.		
The switch should have support for physical stacking with atleast 8 units per stack.		
The switch should have support for virtual stacking with atleast 25 units per stack.		
The Switch should have support for reduandant power supply.		
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		
The Switch should have following L2 features from day one		
1. MAC Address Table size: Atleast 16000		
2. Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
3. Jumbo Frame Support (Atleast 9K bytes)		
4. IGMP v1 v2 v3 snooping with atleast 1024 IGMP snooping groups, Per VLAN IGMP Snooping, host based IGMP snooping fast leave		
5. MLD v1 v2 snooping with atleast 1024 MLD snooping groups, Per VLAN MLD Snooping, host based MLD fast leave		
6. IEEE802.1D STP, 802.1w RSTP,802.1s MSTP with atleast 16 MSTP instances, Root guard or equivalent feature. G.8032 ERPS features.		
7. The switch should be able to avoid the loop occuring in a single port connected to an unmanaged switch/hub by shutting down the corresponding port or corresponding VLAN		
8. IEEE 802.3ad & IEEE 802.1AX Link Aggregation with atleast 8 ports per groups & 32 groups per switch.		

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9. Port mirroring & VLAN mirroring for Tx/Rx/Both. One-to-One	
mode, Many-to-one mode, Flow based mirroring.	
10. IEEE 802.1Q VLAN, atleast 4000 Static VLANs, 4000 Dynamic	
VLANs Groups, GVRP, VoiceVLAN, asymmetric VLAN, 802.1v	
protocol VLAN, MAC based VLAN, Private VLAN.	
The switch should have 802.1p support with 8 queues per port.	
Support strict, WRR queue handling technique. trTCM, srTCM.	
The switch should support CoS based on VLAN, IP address, MAC	
address, DSCP, TCP/UDP port number, 802.1p priority queues, user	
defined packet content, IPv6 address	
The switch should have Port-based ingress & egress bandwidth	
control with minimum granularity of atleast 8Kbps. Flow-based	
ingress & egress bandwidth control with minimum granularity of	
atleast 8Kbps	
The switch should have support for standard & extended Access	
control lists based on VLAN ID, 802.1p priority, MAC address, IP	
Address, DSCP, TCP/UDP port number, user defined packet content,	
IPv6 address. Time based ACL.	
The switch should have the following security features from day one:	
SSHv2 for IPv4 & v6, Broadcast/Multicast & Unicast storm control, port	
security feature with atleast 64 MAC per port, traffic segmentation, ARP spoofing prevention, IEEE 802.1x port based authentication,	
authentication database failover, DHCP server screening, DAI	
(Dynamic ARP Inspection), BPDU attack protection, DoS attack	
prevention, Binding of IP address & MAC address with physical port.	
Web based Access Control, MAC based Access Control, Dynamic	
VLAN assignment, Guest VLAN, RADIUS & TACACS+. Atleast four	
level of user account control.	
The switch should have feature to protect the CPU from protocol	
control packet attack.	
The switch should have feature of atleast 512 static routes, default	
root, RIPv1v2, RIPng, OSPF, Policy Based Routing, at least 128nos. Of	
IP interfaces, IPv6 Neighbor Discovery, VRRP, policy based route	
from first day	
The Switch should have following Management features from day	
one: Web-based GUI, CLI, Telnet Server, TFTP Client, SFTP server,	
SNMPv1v2cv3, SNMP trap, BooTP/DHCP Client, SNTP, NTP, debug	
command, RMONv1, RMONv2, Syslog, ICMPv6, DHCP server, DHCP	
Relay Option 60,61,61,125, LLDP, LLDP-MED, Multiple Image support,	
sflow, trusted host, Physical console port for Out of band	
management.	
OEM should have valid ISO 9001, ISO 14001 & ISO 45001:2018	
certified for design and development of LAN and WAN products, all	
the relevant certificates must be submitted along with the bid.	
OEM Brand and company together presence in India should must be	
for last 20 years and OEM should have a registered office in India,	
from date of RFP publication.	
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.	
The OEM should have their Own service centre running &	
operational within the state of installation (West Bengal) with	
minimum manpower of 5 personals for at least last five years.	
Documentary evidence must be submitted along with the bid.	
The OEM must not be blacklisted or banned by any State/Central	
Government, Semi Government or PSU and any other GOVT.	
organization in INDIA and Globally. OEM offered must be in steady and profitable business in India at-	
least for each of the last 10 Financial years (FY 2012-13 to 2021-22).	
Bidder shall have to submit audited Balance Sheet in support of their	
claim.	
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SECTION-5

Technical Specification Compliance Statement

Minimum Specification of Media Converter

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Type: Ethernet to Fiber Optic Converter Operating Temperature: 0 to 50 Degree Physical Dimension: 97 * 70* 26 mm Mounting Type: Wall mount Single-Mode 10/100Base-TX to 100Base-FX, 		
RJ45 To SC, Fiber Transceiver Up to 25KM (1 Pair)		

SECTION-6

Technical Specification Compliance Statement

Minimum Specification of 20Km SFP Module

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Range: 20KM 1.25G 1310 Single Mode Single Fiber SFP Module - Pair		

SECTION- 7 Technical Specification Compliance Statement

Minimum Specification of 80Km SFP Module

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Type: SFP+ Compatibility: Multi-Vendor MSA Compatible Tx/Rx Wavelength: 1550 nm. / 1550 nm. Media Type: Single-Mode Fiber (SMF) Optical Budget: 23 dB Max. Distance: 80 km Data Rate: 1.25-10.31 Gbps Temperature: Standard 0°-70°C		

SECTION-8

Technical Specification Compliance Statement

Minimum Specification of PON Module

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Usage/Application: OPTICAL LINE TERMINAL USES		
Phase Type: Single Phase Voltage: 220 V		
Frequency: 50 Hz Power		
Source: Electric		
Material: Aluminum		
Packaging Type: Box		

SECTION- 9 Technical Specification Compliance Statement

Minimum Specification of 4 Port OLT

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer 3 OLT brand		
Support 10G Uplink		
Support WEB, CLI and EMS		
Support unify management of data		
VoIP, WiFi and CATV service.		
It can support 256 ONUs under 1:64 splitter ratio.		

SECTION-10

Technical Specification Compliance Statement

Minimum Specification of Optical Network Unit (ONU)

Qty.	6 Nos.
Make	
Model	
Part No	

	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Special Feature	QoS, Remote Access		
Compatible Devices	Personal Computer, Laptop, TV, Smartphone	-	
Frequency Band Class	Dual Band		
Antenna Type	Fixed		

SECTION-11

Technical Specification Compliance Statement

Minimum Specification of CAT-6 CABLE

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Cat6 U/UTP 4 pair Outdoor Cable, solid bare copper with cross filler pair separator exceeding TIA 568-C.2 standard		
Horizontal Cabling Category 6 shall be 23 AWG, 4 Pair UTP, Outdoor double jacketed		
Inner Jacket - Polyethylene (PE)		
Outer jacket - LSZH		
<14 Kg		
Tested upto 250 MHz		
7.2 mm		
305 Mtr Reel		
<=9.38 Ohms / 100 Mtr		
<45 ns		
-20 to +70 Deg C		
Must be ROHS/ELV compliant		
Offered product OEM shall be member of global TIA committee. Membership shall be available for verification at www.tiaonline.org/about/member-list	-	
OEM Should be ISO9001 and ISO14001 certified		
for design, Development for LAN & WAN product.		
Cabling OEM shall have ISO 9001 & 14001 manufacturing facility in India functioning for min 10 years.		

SECTION-12

Technical Specification Compliance Statement

Minimum Specification of HDMI Cable

Qty.	6 Nos.
Make	
Model	
Part No	

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

e ngth: 10 m peed: High-Speed HDMI Cable
apports : Ethernet, 3D, 4K and Audio eturn, With Gold Plated connector, Naterial: 100% Pure Bare Cooper
onductor ensure Highest quality ansmission ompatible Device: Compatible with TV, OMPUTER, PHONE, PROJECTOR, ONITOR, LED, LCD, Black, One Cable)
ONITOR, LED, LCD, Black, One Cable)

SECTION-13

Technical Specification Compliance Statement

Minimum Specification of Extension USB Cable

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 4 in 1 Ultra Slim USB Hub 2.0,1.2 Meter(4 feet) Cable, Transfer Speed of 480MBPS, Universally Compatible with All USB PC Speaker Laptop Hard Drive Keyboard Printer Pen Drive 		

SECTION-14

Technical Specification Compliance Statement

Minimum Specification of 27u Network Rack

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	
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 Compatible Devices:Server Batteries Included:No Batteries Required:No Material:Alloy Steel Mounting Type: Floor Mount 	•	Dimension : 60 x 100 x 131 cm; 80 Kilograms	
 Batteries Required:No Material:Alloy Steel 	•	Compatible Devices:Server	
Material:Alloy Steel	•	Batteries Included:No	
	•	Batteries Required:No	
Mounting Type: Floor Mount	•	Material: Alloy Steel	
	•	Mounting Type: Floor Mount	

SECTION-15

Technical Specification Compliance Statement

Minimum Specification of Wireless keyboard & Mouse

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Colour: Black		
Connectivity Technology: USB		
Special Feature: Wireless, Ergonomic, Optical		
Compatible Devices: Computer, Laptop		

SECTION-16

Technical Specification Compliance Statement

Minimum Specification of UPS

Qty.	6 Nos.
Make	
Model	
Part No	

Sl No		Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	UPS Capacity	l kVA UPS System (1Ph Input /1Ph Output)		
2	Topology	True On-line Double Coverstion UPS		
3	Output power capacity	.8KW (800 Watt)		
4	Input			
4.1	Voltage Range	110 - 300 VAC based on the load percentage		
4.2	Frequency	50 Hz		
	Frequency Range	45 to 55 Hz		
4.3	Power Factor	\geq 0.99 at full load and nominal input Voltage		
4.5	Current THD	< 5%		
5	Output			
5.1	Voltage	230 VAC		
5.2	Voltage Regulation	+/-1%		
5.3	Frequency (Free Running Mode)	$50 \text{ Hz} \pm 0.1 \text{ Hz}$		
5.4	Frequency (Synchronisation	45 to 55 Hz		

	Mode)		
	Harmonic		
5.5	Distortion (THD)	2% (linear load)	
		\leq 5% (non-linear load)	
	Output		
5.6	Waveform	Sine wave	
5.7	Crest Factor Inverter	3:1	
5.8	Efficiency	> 90%	
5.9	Power Factor	0.9 Lagging	
5.10	Overload	101% - 109% for 5 minutes	
		110% - 129% for 1 minute	
		130%-150% for 10 Sec	
	System DC		
5.11	Voltage	≥ 36 VDC	
6 6.1	Battery		
6.2	Battery Type	12 V Sealed Lead Acid Maintenance Free	
6.2 6.3	Battery make Battery charging	Exide/ Quanta with Build in Battery. Constant Current & Constant Voltage	
6.3 6.4	Back up time	30 Mins Backup	
0.4	Dack up mile	Built-in solid state float-cum-equalizing	
6.5	Charger	charger with	
		automatic boost / trickle charge modes with	
		current limiting features.	
6.6	VAH Required	≥ 1008	
7	Efficiency		
	AC/AC (overall	\geq 85% (at full Load)	
8	efficiency) Features		
8.1	Eco mode	Available	
8.2	Overload	Available	
0.2	capacity		
8.3	Converter mode	Available	
8.4	Bypass	Available	
	parameters configurable		
8.5	Display	LCD Display	
9	Mechanical		
	Ingress	IP 20	
	protection		
10.6	Bypass	Static Bypass	
10.7	Maintenance Burpass	Available	
10.1	Bypass Certifications		
12.1	ISO 9001 : 2008		
12.3	ISO 14001 : 2004		
12.4	BIS Certificate		
12.5	PEP Certificate		
	Jorningald	3 Years on UPS & 3 Years on Battery from	
13	Warranty	date of supply.	
		UPS OEM should have toll free number	
14	Service purpose	facilities for all type service call logging support.	
		UPS OEM should have at least minimum	
		10/12 owned Service Centers across West	
15	Criteria	Bengal (Where Spare & Parts stock availabe and UPS will repaire instant)	
10	Uniting	UPS OEM should have single PO Copy &	
		supplied 1000 Units Online UPS in any	
		Govt.project through System Integrator	
		during last 2 (two) years	

UPS OEM should have 500 CR turnover consecutive last 3 financial Years	
UPS OEM should have own Factory	
premises in India	

SECTION-17

Technical Specification Compliance Statement

Minimum Specification of 43'' LED TV

Qty.	24 Nos.
Make	
Model	
Part No	

S1. No.	Section	Parameters	Features	Specification (Quoted / Applicable – by the bidder)	Complied (Yes/ No)
1	Display	Inch	43" or higher		
2		Resolution	3,840 X 2,160 (UHD)		
3		Backlight Unit Type	Direct		
4		Brightness (cd/m2)	300 or higher		
5		Dynamic Contrast Ratio	1,000,000:1 or higher		
6		Refresh Rate	60 Hz		
7	VIDEO SYSTEM	HDR (10 Pro / HLG)	Yes / Yes		
8	AUDIO	Audio Output	10W + 10W		
9	BROADCASTING SYSTEM	Digital (Terrestrial, Cable, Satellite)	DVB-T2/C		
10	SW COMPABILITY	Control / Control Plus, CN	MS(Premium), Simple Editor		
11	SIGNAGE FEATURE	Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certificated, Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager)			
12	SMART FEATURE	Smart Home (Launcher Bar), Web Browser, Pre-loaded App, SDP Server compatibility, Mood Display, Soft AP, WiFi (Version) (802. 11ac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility			
13	KEY FEATURE		e Channel Map, IP Channel er Out (Int Variable/Fixed, ded Type)		
14	JACK INTERFACE	Set Side	HDMI In (3 (2.0)), Headphone Out (Phone Jack Type), RS- 232C(D-Sub 9pin / Phone jack) (Phone Jack, 4pin)		
15		Set Rear	USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out(3.5mm phone jack), RJ45 (Usage Purpose) (LAN)		
16	POWER	Voltage, Hz	100 ~ 240 V, 50/60 Hz		
17	1	Power Consumption (Typ.)	98W or less		
18	1	Stand-by	Under 0.5W		
19	CERTIFICATION	Standard	BIS		
20	1	Safety	CB / CU TR		
21	1	EMC	CE		
22	Warranty	3 Years	•		

SECTION- 18 Technical Specification Compliance Statement

Minimum Specification of Desktop

Qty.	12 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Processor: CPU- Intel @ Core i7- 12 th Gen or higher/ Equivalent AMD Memory: RAM- 16 GB DDR4-3200 M Hz or Higher Hard drive: Storage – 512 GB PCIe NVMe TM TLC M.2 SSD Operating System: Win 11 Prof, MS office Display: 24 inch 5MP FDH or Higher, IPS panel Chipset: Intel Q670 or Higher/ Equivalent AMD USB ports etc:1x HDMI, Min. 3x USB 10Gbps, Wireless Keyboard and Mouse Combo/ Intel Iris Graphics/ IR Privacy Camera Chassis:Yes Warranty:3 Years Onsite		

SECTION-19

Technical Specification Compliance Statement

Minimum Specification of 22'' LED MONITOR

Qty.	12 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Hardware Interface: VGA, HDMI		
Response Time: 5 Milliseconds		
Resolution: FHD 1080p		
Special Features: Flicker-Free		
Mounting Hardware: 1 Unit of Monitor, 1 Unit of adapter & cable		
Display Technology: LED		
Standing screen display size: 22 Inches		
Display Type: IPS		
Colour Screen: No		
Viewing Angle: 178 Degrees		
Image brightness: $250 \text{ cd} / \text{m}^2$		
Aspect Ratio: 16:9		
Screen Resolution: 1920 x 1080		
Resolution: 1080p Full HD		
Wattage: 25 Watts		
Batteries Included: No		
Batteries Required :No		
Refresh Rate: 60 Hz		
Connector Type: VGA, Auxiliary, DVI, HDMI		
Mounting Type: Desk Mount		
Actual viewing angle: 178 Degrees		
Has Auto Focus: No		
Programmable Buttons: No		

SECTION-20

Technical Specification Compliance Statement

Minimum Specification of All in One Printer

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Product Type Laser printers		
Functions Print scan copy and fax		
Connectivity AirPrint [™] , Ethernet networking, USB, Wireless (Wi-Fi®)		
Connectivity, Standard 1 Hi-Speed USB 2.0; 1 rear host USB; 1 Front USB port; Gigabit Ethernet LAN 10/100/1000BASE-T network; 802.3az(EEE); 802.11b/g/n / 2.4 / 5 GHZ Wi-Fi radio + BLE		
Network Capabilities Gigabit Ethernet 10/100/1000BASE- T network; 802.11b/g/n; 2.4/5 GHZ Wi-Fi radio		
Wireless Capability Yes, built-in dual-band Wi-Fi; Authentication via 802.1X; Wi-Fi Direct; Bluetooth Low-Energy		
Mobile Printing Capability Apple AirPrint™; Mopria™ Certified; Wi-Fi® Direct Printing; Optional ROAM Queue Printing; HP ROAM For Business		
Network Protocols, Supported TCP/IP, IPv4, IPv6; Print: TCP-IP port 9100 Direct Mode.		
Plug And Play Auto Wireless Connect; Easy wireless setup. Display 6.9 cm (2.7) intuitive color touchscreen (CGD) Display Area (Metric) 5.4 x 4.05 cm		
Scan Speed (Normal, Letter) Up to 31 ppm (b&w), up to 21 ppm (color)		
Scan Speed (Normal, A4) Up to 29 ppm (b&w), up to 20 ppm (color)		
Cartridge & Printer heads Technology Laser		
Number Of Print Cartridges 1 (black)		
Copy Speed (Black, Normal Quality, A4) Up to 35 cpm Copy Speed Black (Normal, Letter) Up to 37 cpm Copy Speed Black Duplex (A4) Up to 31 cpm		
Copy Speed Black Duplex (Letter) Up to 33 cpm		
Power 110-volt input voltage: 110 to 127 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz) (Not dual voltage, product varies by part number with # Option code identifier)		

Digital Sending Standard Features Scan to email; Scan to PDF, Scan to computer with software	
Storage Device And Direct Print Support Wireless direct printing; Optional job storage via external rear host USB port (Minimum 16GB); Walk-up USB printing	
Duty Cycle (Monthly, Letter) Up to 80,000 pages	
Duty Cycle Note Duty cycle is defined as the maximum number of pages per month of imaged output.	
Envelope Feeder No Functions Print, Copy, Scan Internal Storage No	
Paper Trays, Maximum 3	
Duty Cycle (Monthly, A4) Up to 80,000 pages	
Paper Trays, Standard 2	
Duplex Printing Automatic (default)	
Memory Card Compatibility No	
Print Colours NO	

SECTION-21

Technical Specification Compliance Statement

Minimum Specification of Antivirus

Qty.	6 Set
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Works on: Windows 11, 10, 8.1 fully patched (32- and 64- bit) Number of Users: 2 User ; Validity: 3 Years 		

SECTION-22

Technical Specification Compliance Statement

Minimum Specification of 16 Channel IPBEX

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Telephone Type: Corded Power Source: Corded Electric Dialer Type: Single Keypad Intercom (extn. to extn. call between 8 Intercoms) Call transfer, call hold and busy transfer Call Pick-up form any extension 		

SECTION-23

Technical Specification Compliance Statement

Minimum Specification of Telephone IP Phone Receiver

Qty.	60 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Compatible Devices: SIP Line , IPPBX , VOIP Call		
Standing screen display size: 2.48 Inches Display		
Type: LCD		
Power Source: Corded Electric		
Batteries Included: No		
Batteries Required: No		
Mounting Type: Desktop		

SECTION-24

Technical Specification Compliance Statement

Minimum Specification of CCTV Camera with audio

Qty.	12 Nos.
Make	
Model	
Part No	

S.NO	Parameters	Value	Specification (Quoted / Applicable – by the bidder)	Compliance (Yes/ No)
1	Type of Camera Housing	Bullet		
2	Camera Type	IP Based		
3	Image Sensor Type	CMOS		
4	Image Sensor Size	0.370 or better		
5	Camera Image Sensing	4 MP or better		
6	Resolution	2688 x 1520		
7	Day/Night Capable	Yes		
8	IR illumination Range(mtr)	120 or better		
9	Lens Type	Fixed Iris		
10	Focal Length(mm)	3.6mm or as per the site		
11	Mount Type	M12		

13 Video Compression H.265 & H.264 14 Video Streams Tri-Stream or better 15 Digital Zoom 10x or Better 16 Number of Audio 1 for external MIC / built-in Mic 17 Number of Audio 1 (RCA) 18 Alarm Support Yes 19 Number of Alarm 1 or Better 20 Number of Alarm 1 or Better 21 Malt Level User Yes 22 Mult Level User Yes 23 IP Address Filtering Yes 24 Humination for 0.005 Lux@F1.6 Or Better 1mage 0.005 Lux@F1.6 Or Better 1 125 Speed(sec) 1/3 s-1/100000 s 26 Dynamic Bange) 120 db or better 27 SRR (Signal to Noise >49 Db or better 28 White Balance Yes 30 Back Light Yes 31 Remoter Yes 32 OrVUF Support Profile S.Profile G 33 Privacy Zones 4 34 Supported SD Sil2 GB or better 34 Supported SD Sil2 GB or better 35 Garad Sil2 GB or better 36 </th <th>12</th> <th>Frame Rate (fps)</th> <th>Main stream (2688 × 1520@1–25/30 fps) ; sub stream (704 × 576@1–25/30 fps) ; third stream (1280 × 720@1–25/30 fps)</th> <th></th>	12	Frame Rate (fps)	Main stream (2688 × 1520@1–25/30 fps) ; sub stream (704 × 576@1–25/30 fps) ; third stream (1280 × 720@1–25/30 fps)	
14 Video Streams Tri-Stream or better 15 Digital Zoom 10x or Better 16 Number of Audio 1 for external MIC / built-in Mic 17 Output Channel 1 for external MIC / built-in Mic 18 Alarm Support Yes 19 Number of Alarm 1 or Better 10 Number of Marm 1 or Better 20 Number of Marm 1 or Better 21 Multi Level User Yes 22 Multi Level User Yes 23 IP Address Filtering Yes 24 Multi Level User Yes 25 Electronic Shutter 1/3 s-1/100000 s 36 Speed(sec) 120 db or better 26 WDK (Wide 120 db or better 27 SNR (Signal to Noise >49 Db or better 28 Auto Gain Control Yes 29 Auto Gain Control Yes 30 Compensation Yes 31 Remote Yes 32 OtVPI Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols ShiTP; FTP; DKCP; DNS; DDNS; PPPAC; IPv4/ve; SNMP; Oo; UPAP; NTP; CGI 35 Max supporte	13	Video Compression	H.265 & H.264	
16 Number of Audio Input Channel 1 for external MIC / built-in Mic 17 Number of Audio Output Channel 1 (RCA) 18 Alarm Support Yes 19 Input 1 or Better 20 Output 1 or Better 21 Mumber of Alarm Input 1 or Better 22 Multi Level User ID/Password Yes 23 IP Address Filtering Yes 24 Multimation for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Speed(sec) 1/3 s-1/100000 s 26 WDR (Wide Dynamic Range) 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIP Support Profile S.Profile G 33 Privacy Zones 4 44 Supported Protocols SMTP: FTP: DHCP: DNS; DDNS; PPPCE; IPV4/v6; SNMT? COS; UPN; PIT?; CGI 34 Supported SD S12 GB or better	14	_	Tri-Stream or better	
16 Number of Audio Input Channel 1 for external MIC / built-in Mic 17 Number of Audio Output Channel 1 (RCA) 18 Alarm Support Yes 19 Number of Alarm Input 1 or Better 20 Output 1 or Better 21 MAdress Filtering Yes 22 Multi Level User ID/Password Yes 23 IP Address Filtering Yes 24 Mumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Speed(sec) 1/3 s-1/100000 s 26 WDR. (Wide Dynamic Range) 120 db or better 27 SNR (Signal to Noise >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Yes 31 Remote Administration Yes 32 ONVIP Support Profile S.Profile G 33 Privacy Zones 4 44 Supported Protocols SMTP: FTP: DHCP: DNS; DDNS; PPPCE; IPV4/v6; SNMP; CoS; UPA; NTP; CGI 34 Supported SD S12 GB or better	15	Digital Zoom	10x or Better	
Input Channel 1 17 Number of Aulio 1 (RCA) 18 Alarm Support Yes 19 Number of Alarm 1 or Better 20 Mumber of Alarm 1 or Better 21 Mulber of Alarm 1 or Better 22 Mulber of Alarm 1 or Better 23 IP Address Filtering Yes 24 The Jevel User Yes 25 IP Address Filtering Yes 26 Thinimum 0.005 Lax@F1.6 Or Better 27 Electronic Shutter 1.73 s-1/100000 s 28 Speed(sec) 1.73 s-1/100000 s 29 Buck Weide 120 db or better 21 SNR (Signal to Noise >49 Db or better 22 Multi Balance Yes 30 Back Light Yes 31 Remote Yes 32 ONVIT Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols ShTP; PTP; PTP; DTP; DNS; D	16	÷	l for ortornal MIC / built in Mig	
17 Output Channel 1 (RCA) 18 Alarm Support Yes 19 Number of Alarm 1 or Better 20 Number of Alarm 1 or Better 21 Multi Level User Yes 22 Multi Level User Yes 23 IP Address Filtering Yes 24 Electronic Shutter 0.005 Lux@F1.6 Or Better 25 Speed(sec) 0.005 Lux@F1.6 Or Better 26 WDR (Wide 120 db or better 27 Ratio) 240 db or better 28 White Balance Yes 29 Auto Gain Control Yes 29 Auto Gain Control Yes 30 Back Light Yes 31 Remote Yes 32 ONVIP Support Profile S,Profile G 33 Privacy Zones 4 44 Supported Protocols Sil2 GB or better 34 Supported SD Sil2 GB or better 35 Max supported SD Sil2 GB or better 36 Protection IP67 or better <td>10</td> <td></td> <td></td> <td></td>	10			
19 Number of Alarm Input 1 or Better 20 Number of Alarm Output 1 or Better 21 Multi level User ID/Password Yes 23 IP Address Filtering Yes 24 Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Electronic Shutter Speed(sec) 1/3 s-1/100000 s 26 WDR (Wide 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 20 NUTF Support Profile S, Profile G 30 Back Light Yes 31 Remote Administration Yes 32 ONVIF Support Profile S, Profile G 33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; PTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP; CG1 35 Mar supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Mar. Operating Temperature -40 deg C 39 Mar. Operating Temperature 55 deg C 39	17		1 (RCA)	
19 Input 1 or Better 20 Number of Alarm 1 or Better 21 Multi Level User Yes 23 IP Address Filtering Yes 24 Mumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Speed(sec) 0.005 Lux@F1.6 Or Better 26 DYR (Wide 120 db or better 27 SNR (Signal to Noise >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Compensation Yes 31 Remote Yes 32 ONUP Support Profile S.Profile G 33 Privacy Zones 4 34 Supported Protocols SMTP; PTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPAP; NTP; CG1 34 Supported SD 512 GB or better 1 37 Max supported SD 512 GB or better 1 38 Power Input 12V DC/POE 1 39 Max. Operating -40 deg C 1 39 Mounting Type Wall 1 <	18		Yes	
20 Output 1 or Better 21 Multi Level User ID/Password Yes 23 IP Address Filtering Yes 24 Mumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Electronic Shutter 1/3 s-1/100000 s 26 WDR (Wide) 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 20 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols Supported SD Card 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Muc Condating 40 deg C 34 Power Input 12V DC/POE 35 Gard Temperature 39 Houting Type Wall	19	Input	l or Better	
22 Multi Level User D/Password Yes 23 IP Address Filtering Yes 24 Minimum Illumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Electronic Shutter Speed(sec) 1/3 s-1/100000 s 26 WDR (Wide Dynamic Range) 120 db or better 27 RR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols ShTP; FTP; DHCP; DNS; DDNS; PPPE; IPv4/v€; SNMP; OoS; UPnP; NTP; CGI 38 Max supported SD Card 512 GB or better 39 Max supported SD Card 512 GB or better 31 Portection IP67 or better 33 Protection IP67 or better 34 Power Input 12V DC/POE 35 Max. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Not Condensing I denote througing (Becomption of human	20		1 or Better	
24 Minimum Illumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Electronic Shutter Speed(sec) 1/3 s-1/100000 s 26 WDR (Wide Dynamic Range) 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 20 Back Light Compensation Yes 30 Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols SMTP; FTP: DHCP; DNS; DDNS; PPD6; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature 54 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing less than 95% RH (%) Yearsatior Zivears <td>22</td> <td>Multi Level User</td> <td>Yes</td> <td></td>	22	Multi Level User	Yes	
24 Illumination for Capturing Color Image 0.005 Lux@F1.6 Or Better 25 Speed(sec) 1/3 s-1/100000 s 26 WDR (Wide Dynamic Range) 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols SITP; FTP; DICP; ARP; RTSP; RTCP; IPv4/v6; SNMP; QoS; UPNP; NTP; CG1 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing less than 95% RH (%) Itemperature Tripurine. Intrusion (Becompilion of human)	23	IP Address Filtering	Yes	
25 Speed(sec) 173 s-17100000 s 26 WDR (Wide 120 db or better 27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty Zyears	24	Illumination for Capturing Color Image	0.005 Lux@F1.6 Or Better	
28 Dynamic Range) 120 db of Better 27 RSNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S.Profile G 33 Privacy Zones 4 34 Supported Protocols MTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95% RH 42 Warranty 2years	25	Speed(sec)	1/3 s-1/100000 s	
27 SNR (Signal to Noise Ratio) >49 Db or better 28 White Balance Yes 29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S.Profile G 33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	26		120 db or better	
29 Auto Gain Control Yes 30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty Zyears	27	SNR (Signal to Noise	>49 Db or better	
30 Back Light Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature S5 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty Zyears	28	White Balance	Yes	
30 Compensation Yes 31 Remote Administration Yes 32 ONVIF Support Profile S,Profile G 33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	29	Auto Gain Control	Yes	
31Remote AdministrationYes32ONVIF SupportProfile S,Profile G33Privacy Zones434Supported ProtocolsHTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI35Max supported SD Card512 GB or better36ProtectionIP67 or better37Mounting TypeWall38Power Input12V DC/POE39Min. Operating Temperature-40 deg C40Max. Operating Temperature55 deg C41(%)less than 95%RH (%)42Warranty2years44Tripwire Intrusion (Recognition of human	30		Yes	
33 Privacy Zones 4 34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95% RH 42 Warranty 2years	31		Yes	
34 Supported Protocols HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	32	ONVIF Support	Profile S, Profile G	
34 Supported Protocols SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI 35 Max supported SD Card 512 GB or better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C Relative Humidity less than 95%RH (%) Zyears	33	Privacy Zones	4	
35 Card 312 GB of Better 36 Protection IP67 or better 37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	34	Supported Protocols	SMTP; FTP; DHCP; DNS; DDNS; PPPoE;	
37 Mounting Type Wall 38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	35		512 GB or better	
38 Power Input 12V DC/POE 39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	36	Protection	IP67 or better	
39 Min. Operating Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	37	Mounting Type	Wall	
39 Temperature -40 deg C 40 Max. Operating Temperature 55 deg C 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	38	-	12V DC/POE	
40 Temperature 55 deg C Relative Humidity Relative Humidity 41 Non Condensing (%) less than 95%RH 42 Warranty 2years	39	Temperature	-40 deg C	
41 Non Condensing (%) less than 95%RH 42 Warranty 2years Tripwire Intrusion (Becognition of human	40	Temperature	55 deg C	
Tripwire Intrusion (Recognition of human	41	Non Condensing	less than 95%RH	
Tripwire Intrusion (Recognition of human	42	Warranty	2years	
43 IVS and vehicle)	43	IVS	Tripwire, Intrusion (Recognition of human and vehicle)	
44 Certification CE, FCC, RoHS, BIS, Onvif	44	Certification	CE, FCC, RoHS, BIS, Onvif	

SECTION-25

Technical Specification Compliance Statement Minimum

Specification of Biometric attendance Control

Qty.	6 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Type & Connectivity: Fingerprint, card & pin authentication with Wifi connectivity. Cloud Compatible attendance device		
User Capacity: Upto 19000 fingerprint template & upto 180000 transaction capacity		
Ports: TCP/IP, Wi-Fi.		
Compatible: With Mobile app		
Display: 2.4 inch TFT Color Display		
Extra Feature: Device has to be professional door access control feature.		

SECTION-26

Technical Specification Compliance Statement

Minimum Specification of P.15 video wall (8 x 12) ft with one processor

Qty.	6 Nos.
Make	
Model	
Part No	

S1. No.	Section	Parameters	Features	Specification (Quoted / Applicable – by the bidder)	Complied (Yes/ No)
1	Physical Parameters	Screen Size (w x H)	4.2m x 1.35m or bigger		
		Total Resolution of Screen	2688 X 864 or more		
		Cabinet Size	600mm x 337.5mm		
		Pitch pitch	1.57 mm or less		
		Pixel Configuration	3 in 1 SMD		
		Weight per Cabinet	7 Kg or less		
		Physical Pixel Density (pixels/m ²)	409600 or more		
		Flatness of Unit Case (mm)	±0.5 or less		
		Cabinet Depth	72mm or less		

	Unit Case material	Die casting Aluminium or Die Casting Magnesium	
	Service access	Front	
Optical Specifications	Minimum Brightness (After Calibration)	600 cd/m2 or more	
	Color Temperature	3200 - 9300 or better	
	Visual Viewing Angle (Horizontal)	160 or more	
	Visual Viewing Angle (Vertical)	150 or more	
	Brightness Uniformity	97% or more	
	Color Uniformity	±0.003CxCy	
	Contrast Ratio	5000 or more	
	Processing Depth (bit)	14 or more	
	Power Consumption (W/m², Max.)	550 or less	
	Power Supply (V)	100 to 240	
	Frame Rate (Hz)	50 or more	
	Refresh Rate (Hz)	3840 or more	
Operation Specifications	Lifetime	100000 hr or more	
	Operating Temperature	0° to +40°	
	Operating Humidity	10~80%RH	
	IP rating Front	IP50	
	IP rating Rear	IP50	
Certifications	Certifications	CE, FCC, UL, EMC, RoHS BIS, CB and REACH	
LED Controller of same Make as LED Screen with Original OEM Software	Inputs	HDMI HDCP 2.2 , DP & OPS Slot	
for Configuration	Controller of Same Make as LED Screen	Yes	
	Resolution Supported	3840x2160 @ 60HZ or better	
	Output Pixel	8.2 Million or more	
	Control Ports	RS232C Loop and LAN	
	LAN Output	Minimum 16 or more	
	Temperature Sensor	Yes	
	Chrome Adjustment	Yes	
	Quality & Security Standards/ Test Reports of Quoted Controller Model	IEC 62368-1:2018 UL 60950-1:2007	
	Original LED Configuration Software of LED Screen OEM	Yes	
	Brightness Adjustment	Yes	
	Scaling	Yes	
	HDR 10 + / HDR 10 Pro	Yes	
	Operating System	Yes	
	Remote Control	Yes remote for Easy	

		Usage	
	Signal Redundancy	Yes	
	Support		
Digital Signage Software of Same Brand as LED	Secure Platform with Maximum Protection	Yes	
Controller and LED	to Prevent Hacking or		
Cabinet, Compliance to	Unauthorised Access		
Security Standards to be Confirmed on OEM	Operating System Platform Security	Sandboxing -Jailer MD5/AES decryption	
Letterhead		API	
		Application encryption	
		Https (TLS v1.2 and	
		above)	
		Proxy and exception domain	
		Port Control	
		Internal security	
		testing	
		TTA certification UL2900 certification	
		for Security Manager	
		(ANSI, FDA standard)	
	Notreest Or and it of	Able to check file	
	Network Security & Security testing and	integrity so that	
	Certification	downloaded file is	
		not crashed, corrupted or	
		manipulated	
		Able to use	
		encrypted contents for security	
		Supports Application	
		Encryption	
		To prevent hooking application and	
		source code	
	Designing Content & So	cheduling Content	
	Screen Wise over Netw	vork	
	Capability to Divide Screen into Multiple		
	Zones and Play Different Images., Video, URL, HDMI input etc in Zones		
OEM Eligibility	OEM Brand should hav		
	India from last 10 years (Incorporation		
	Certificate Required) OEM Brand should have valid PF & GST		
	registration certificate in India.		
	OEM Brand should hav	e valid certificates	
	ISO9001, ISO14001, ISO45001 for India		
	OEM Brand should have Local GSTN		
	registration. OEM Brand should have Local Branch office,		
	Service Branch & warehouse to maintain		
	spares/Stand by units to provide fast and smooth service from 5 years in the State.		
		e minimum turnover of	
		l years in India (BL/CA	
	Certify letter required) 2019/2020/2021 (Per		
	year)		

OEM Brand should have experience of supply Minimum 10 LED Screens in any Government department in last Two financial years Direct or through Partner, (Po/Supply order/Agreement/ Similar Document is required)	
LED OEM should have direct registered office and Direct Service Centre in state from Last 10 years with toll free Number for Call logging.	

Technical Specification Compliance Statement for Police

Districts

Minimum Specification of 32 Channel NVR

Qty.	196 Nos.
Make	
Model	
Part No	

SL No.	Parameters	Value	Specification (Quoted / Applicable – by the bidder)	Compliance (Yes/ No)
1	Type of Recording Device*	NVR		
2	IP Camera Support*	Yes		
3	PTZ Camera Support*	Yes		
4	Capability of Recorder to Work with Other Makes of CCTV Cameras (ONVIF support)*	Yes		
5	Number of IP Camera supported in Recorder	32		
6	Camera Supported	12MP or Better		
7	Supported Compression Technique*	H.265 & H.264		
8	Maximum Number of cameras to be viewed on a single display*	32		
9	Total number of simultaneous local views	l or Better		
10	Simultaneous Monitoring Connections for Cameras (Users in Local Network for Client Connection)*	l or Better		
11	Min. Through put (Mbps)*	256 Mbps		
12	Audio Support*	Yes		
13	Two-way Audio Support*	Yes		
14	Type of Encryption*	HTTPS & WATER MARKING		
15	Alarm Input*	12		
16	Alarm Output*	4		
17	Supported Network Protocols*	As per site requirement		
18	Supported Interface*	Ethernet ,HDMI, VGA,USB,RS 232, RS485		
19	Number of Ethernet Ports*	2		
20	Number of HDMI Ports*	1		
21	Number of VGA Ports*	1		
22	Number of USB Ports*	2		
23	Slient feature Supported	Remote Adminstration, OTA update,PC Client, Web Client		
24	Recording schedule support*	Yes along with MD/Alarm based,/Event based /Analytic based		

WEBEL TECHNOLOGY LIMITED

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25	Bandwidth Control*	Constant Bit Rate (CBR), Variable Bit Rate (VBR)	
26	Camera Notification*	POP up Window on Event, E- mail SNAP SHOT	
27	Search*	Date, Time, Event, Log, Motion, Bookmarks, Full Screen, Next Camera, Previous Camera, Repeat	
28	IVS by NVR	Face detection; face recognition; perimeter protection	
29	Camera*	Add, Edit, Delete	
30	Number of Hard Disk Slots	4	
31	Storage Capacity of each HDD slot	10	
32	Power Input*	12V DC/100 V-240 V AC	
33	Minimum Operating Temperature*	-10	
34	Maximum Operating Temperature*	50	
35	Relative Humidity Non Condensing at 40 deg C*	90	
36	Warranty*	2	
37	BIS Registration for safety general requirements as per IS: 13252 (Part 1): latest*	Yes	
38	Certifications	FCC, UL, CE, RoHS, BIS	

OEM Pre-qualification criteria for NVR and CCTV

#	Criteria	Supporting Document
1.	The OEM of component such as IP Camera, Storage, NVR/ VMS Software and Network Switches should not be blacklisted or banned or barred by any government agency in any country. The OEM Should not be charged or prosecuted for any cheating or fraudulent case(s) in India for their respective product line.	Declaration of OEM on Letterhead
2.	The OEM of CCTV Camera should be a fulltime member of ONVIF and quoted models should be listed on official website of ONVIF. The CCTV OEM should not be suspended/ blacklisted by ONVIF.	OEM declaration on Letterhead supported by valid certificates (valid as on technical bid opening date) / reference documents.
3.	The OEM of CCTV component should be CMMI Level 5 or above certification.	
4.	The OEM of CCTV component should have General Data Protection Regulation (GDPR) certification.	
5.	The OEM of CCTV component should have ISO Certifications for Quality, Environment, Security management, Health & Safety Management system, etc. for manufacturing of all types of Cameras, NVR/ DVR and allied component. - ISO 9001:2015 - ISO 14001:2015 - ISO 27001:2013 - ISO 45001:2018 - ISO 27032:2012	The Bidder/s shall attach the copy of the OEM's ISO Certificate along with the bid.
6.	All the CCTV Component such as Camera, VMS, NVR, DVR, etc should be from same OEM for seamless integration and ease of operation. All CCTV cameras offered in this tender should be UL, CE, FCC, RoHS and BIS certified.	Declaration of OEM on Letterhead along the copies of certificates.

7.	The OEM should have average Annual turnover of INR 100 Crores during the last 3 Financial Year ending 31st March 2021.	Audited balance sheet form statutory auditor
8.	The OEM of CCTV component should have its office and service/ support centre in Kolkata	Certificate of office establishment, statutory tax registration certificates such as Trade license, GST registration certificate, etc. to be provided.
9.	The camera OEM should be a genuine manufacturer and should have offical valid H.265 HEVC certificate and should be listed on HEVC website at the time of submitting bid. They should be paying the licenced fee for using the genuine HEVC compression legally. The same will be cheked on following official website. <u>https://www</u> . mpegla.com/programs/hevc/licensees/	Declaration of OEM on Letterhead

SECTION- 2 Technical Specification Compliance Statement

Minimum Specification of 55 inch LED TV

Qty.	196 Nos.
Make	
Model	
Part No	

S1. No.	Section	Parameters	Features	Specification (Quoted / Applicable – by the bidder)	Complied (Yes/ No)
1		Screen Size	55" or higher		
2		Panel Technology	IPS or VA		
3		Aspect Ratio	16:09		
4		Native Resolution	3,840 x 2,160 (UHD)		
5		Backlight Unit Type	Edge		
6	Panel	Brightness (cd/m2)	500nit or higher		
7	Pallel	Dynamic Contrast Ratio	10,00,000:1 or higher		
8		Viewing Angle (H x V)	178 x 178 or higher		
9		Response Time	8ms(G to G) or better		
10		Surface Treatment (Haze)	Haze 28% or better		
11		Operation Hours	24x7 Hrs		
12		Orientation	Landscape & Portrait		
13		Input	HDMI (3), DP, Audio, USB (2)		
14	Connectivity	Output	HDMI, Audio		
15		External Control	RS232C In/out, RJ45 (LAN) In, IR In		
16	Mechanical	Bezel Color	Black		
17	Specification	VESA	300 x 300 or as per OEM		
18	Key Feature	Internal Memory 16 GB, Built-in Wi-Fi, Temperature Sensor, Auto Brightness sensor, Acceleration(Gyro) Sensor, Local Key Operation, Embedded CMS (Local Contents Scheduling, Group Manager), USB Plug & Play, Fail over, Background Image (Booting Logo Image, No Signal Image), Sync Mode (RS-232C Sync, Local Network Sync), Multi-screen (PIP, PBP (4)), Screen Share, Video Tag (4), Play via URL, Rotation (Screen Rotation, External Input Rotation), Gapless Playback, Tile Mode Setting (Max. 15 × 15), Setting Data Cloning, SNMP, ISM Method, Auto Set ID, Status Mailing, Control Manager, 3rd Party Compatibility (Crestron Connected), Power (Smart			

		Energy Saving, PM mode, Wake on LAN, Network Ready), Beacon, HDMI-CEC, SI Server Setting, webRTC		
19	Environmental	Operation Temperature	0°C to 40°C	
20	Conditions	Operation Humidity	10% to 80%	
21		Power Supply	100-240V~, 50/60Hz	
22	Power	Power Type	Built-In Power	
23		Consumption: Smart Enegy Saving / Max.	130W / 180W	
24	Software	Content Management Software	SuperSign CMS	
25	Compatibility	Control and Monitoring Software	SuperSign Control / Control+	
26		Safety	CB/NRTL	
27	Certification	EMC	FCC Class "B" / CE / KC	
28		ErP / Energy Star	Yes / Yes	
29	Special	IP Rating	IP5x	
30	Feature	Warranty	3 Years	
31				

SECTION- 3 Technical Specification Compliance Statement Minimum Specification of 24 Port L2 Managed Switch

Qty.	56 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer-2 Fully Managed Stackable Switch having 24 x 10/100/1000 baseT ports with 2x 10GBASE-T ports & 4x 10G SFP+ slots		
Switching Capacity should be atleast 168Gbps		
Packet Forwarding Rate should be atleast 125Mpps for 64-byte packet size		
The switch should have non-blocking architecture & wire-speed performance under fully loaded condition from day one		
The switch should have smart fans with sensor IC that provides different fan speed based on different temperature.		
The switch should have support for physical stacking with atleast 8 units per stack.		
The switch should have support for virtual stacking with atleast 25 units per stack.		
The Switch should have support for reduandant power supply.		
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		
The Switch should have following L2 features from day one		
1. MAC Address Table size: Atleast 16000		
2. Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
3. Jumbo Frame Support (Atleast 9K bytes)		

4. IGMP v1 v2 v3 snooping with atleast 1024 IGMP snooping groups, Per VLAN IGMP Snooping, host based IGMP snooping fast leave	
5. MLD v1 v2 snooping with atleast 1024 MLD snooping groups, Per	
VLAN MLD Snooping, host based MLD fast leave 6. IEEE802.1D STP, 802.1w RSTP,802.1s MSTP with atleast 16 MSTP	
instances, Root guard or equivalent feature. G.8032 ERPS features.	
7. The switch should be able to avoid the loop occuring in a single	
port connected to an unmanaged switch/hub by shutting down the	
corresponding port or corresponding VLAN	
8. IEEE 802.3ad & IEEE 802.1AX Link Aggregation with atleast 8 ports	
per groups & 32 groups per switch.	
9. Port mirroring & VLAN mirroring for Tx/Rx/Both. One-to-One	
mode, Many-to-one mode, Flow based mirroring.	
10. IEEE 802.1Q VLAN, atleast 4000 Static VLANs, 4000 Dynamic VLANs Groups, GVRP, VoiceVLAN, asymmetric VLAN, 802.1v	
protocol VLAN, MAC based VLAN, Private VLAN.	
The switch should have 802.1p support with 8 queues per port.	
Support strict, WRR queue handling technique. trTCM, srTCM.	
The switch should support CoS based on VLAN, IP address, MAC	
address, DSCP, TCP/UDP port number, 802.1p priority queues, user	
defined packet content, IPv6 address The switch should have Port-based ingress & egress bandwidth	
control with minimum granularity of atleast 8Kbps. Flow-based	
ingress & egress bandwidth control with minimum granularity of	
atleast 8Kbps	
The switch should have support for standard & extended Access	
control lists based on VLAN ID, 802.1p priority, MAC address, IP	
Address, DSCP, TCP/UDP port number, user defined packet content, IPv6 address. Time based ACL.	
The switch should have the following security features from day one:	
SSHv2 for IPv4 & v6, Broadcast/Multicast & Unicast storm control, port	
security feature with atleast 64 MAC per port, traffic segmentation,	
ARP spoofing prevention, IEEE 802.1x port based authentication,	
authentication database failover, DHCP server screening, DAI (Dynamic ARP Inspection), BPDU attack protection, DoS attack	
prevention, Binding of IP address & MAC address with physical port.	
Web based Access Control, MAC based Access Control, Dynamic	
VLAN assignment, Guest VLAN, RADIUS & TACACS+. Atleast four	
level of user account control.	
The switch should have feature to protect the CPU from protocol control packet attack.	
The switch should have feature of atleast 512 static routes, default	
root, RIPv1v2, RIPng, OSPF, Policy Based Routing, at least 128nos. Of	
IP interfaces, IPv6 Neighbor Discovery, VRRP, policy based route	
from first day	
The Switch should have following Management features from day one: Web-based GUI, CLI, Telnet Server, TFTP Client, SFTP server,	
SNMPv1v2cv3, SNMP trap, BooTP/DHCP Client, SNTP, NTP, debug	
command, RMONv1, RMONv2, Syslog, ICMPv6, DHCP server, DHCP	
Relay Option 60,61,61,125, LLDP, LLDP-MED, Multiple Image support,	
sflow, trusted host, Physical console port for Out of band	
management.	
OEM should have valid ISO 9001, ISO 14001 & ISO 45001:2018 certified for design and development of LAN and WAN products, all	
the relevant certificates must be submitted along with the bid.	
OEM Brand and company together presence in India should must be	
for last 20 years and OEM should have a registered office in India,	
from date of RFP publication.	
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.	
The OEM should have their Own service centre running & operational within the state of installation (West Bengal) with	
minimum manpower of 5 personals for at least last five years.	
Documentary evidence must be submitted along with the bid.	

The OEM must not be blacklisted or banned by any State/Central Government, Semi Government or PSU and any other GOVT. organization in INDIA and Globally.	
OEM offered must be in steady and profitable business in India at- least for each of the last 10 Financial years (FY 2012-13 to 2021-22). Bidder shall have to submit audited Balance Sheet in support of their claim.	

SECTION-4

Technical Specification Compliance Statement Minimum Specification of 24 Port SFP Switch

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer-2 Fully Managed Stackable Switch having 24x 1G SFP slots with 2x 10GBASE-T ports & 4x 10G SFP+ slots		
Switching Capacity should be atleast 168Gbps		
Packet Forwarding Rate should be atleast 125Mpps for 64-byte packet size		
The switch should have non-blocking architecture & wire-speed performance under fully loaded condition from day one		
The switch should have smart fans with sensor IC that provides different fan speed based on different temperature.		
The switch should have support for physical stacking with atleast 8 units per stack.		
The switch should have support for virtual stacking with atleast 25 units per stack.		
The Switch should have support for reduandant power supply.		
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		
The Switch should have following L2 features from day one		
1. MAC Address Table size: Atleast 16000		
2. Flow Control: IEEE 802.3x in full duplex, back pressure in half duplex & HoL blocking prevention		
3. Jumbo Frame Support (Atleast 9K bytes)		
4. IGMP v1 v2 v3 snooping with atleast 1024 IGMP snooping groups, Per VLAN IGMP Snooping, host based IGMP snooping fast leave		
5. MLD v1 v2 snooping with atleast 1024 MLD snooping groups, Per VLAN MLD Snooping, host based MLD fast leave		
6. IEEE802.1D STP, 802.1w RSTP,802.1s MSTP with atleast 16 MSTP instances, Root guard or equivalent feature. G.8032 ERPS features.		
7. The switch should be able to avoid the loop occuring in a single port connected to an unmanaged switch/hub by shutting down the corresponding port or corresponding VLAN		
8. IEEE 802.3ad & IEEE 802.1AX Link Aggregation with atleast 8 ports per groups & 32 groups per switch.		
9. Port mirroring & VLAN mirroring for Tx/Rx/Both. One-to-One mode, Many-to-one mode, Flow based mirroring.		
10. IEEE 802.1Q VLAN, atleast 4000 Static VLANs, 4000 Dynamic VLANs Groups, GVRP, VoiceVLAN, asymmetric VLAN, 802.1v protocol VLAN, MAC based VLAN, Private VLAN.		

The switch should have 802.1p support with 8 queues per port.		
Support strict, WRR queue handling technique. trTCM, srTCM.		
The switch should support CoS based on VLAN, IP address, MAC		
address, DSCP, TCP/UDP port number, 802.1p priority queues, user		
defined packet content, IPv6 address		
The switch should have Port-based ingress & egress bandwidth		
control with minimum granularity of atleast 8Kbps. Flow-based		
ingress & egress bandwidth control with minimum granularity of		
atleast 8Kbps		
The switch should have support for standard & extended Access		
control lists based on VLAN ID, 802.1p priority, MAC address, IP		
Address, DSCP, TCP/UDP port number, user defined packet content,		
IPv6 address. Time based ACL.		
The switch should have the following security features from day one:		
SSHv2 for IPv4 & v6, Broadcast/Multicast & Unicast storm control, port		
security feature with atleast 64 MAC per port, traffic segmentation,		
ARP spoofing prevention, IEEE 802.1x port based authentication,		
authentication database failover, DHCP server screening, DAI		
(Dynamic ARP Inspection), BPDU attack protection, DoS attack		
prevention, Binding of IP address & MAC address with physical port.		
Web based Access Control, MAC based Access Control, Dynamic		
VLAN assignment, Guest VLAN, RADIUS & TACACS+. Atleast four		
level of user account control.		
The switch should have feature to protect the CPU from protocol		
control packet attack.		
The switch should have feature of atleast 512 static routes, default		
root, RIPv1v2, RIPng, OSPF, Policy Based Routing, at least 128nos. Of		
IP interfaces, IPv6 Neighbor Discovery, VRRP, policy based route		
from first day		
The Switch should have following Management features from day		
one: Web-based GUI, CLI, Telnet Server, TFTP Client, SFTP server,		
SNMPv1v2cv3, SNMP trap, BooTP/DHCP Client, SNTP, NTP, debug		
command, RMONv1, RMONv2, Syslog, ICMPv6, DHCP server, DHCP		
Relay Option 60,61,61,125, LLDP, LLDP-MED, Multiple Image support,		
sflow, trusted host, Physical console port for Out of band		
management.		
OEM should have valid ISO 9001, ISO 14001 & ISO 45001:2018		
certified for design and development of LAN and WAN products, all		
the relevant certificates must be submitted along with the bid.		
OEM Brand and company together presence in India should must be		
for last 20 years and OEM should have a registered office in India,		
from date of RFP publication.		
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.		
The OEM should have their Own service centre running &		
operational within the state of installation (West Bengal) with		
minimum manpower of 5 personals for at least last five years.		
Documentary evidence must be submitted along with the bid.		
The OEM must not be blacklisted or banned by any State/Central		
Government, Semi Government or PSU and any other GOVT.		
organization in INDIA and Globally.		
OEM offered must be in steady and profitable business in India at-		
least for each of the last 10 Financial years (FY 2012-13 to 2021-22).		
Bidder shall have to submit audited Balance Sheet in support of their		
claim.		
	· · · · · · · · · · · · · · · · · · ·	

SECTION-5

Technical Specification Compliance Statement

Minimum Specification of Media Converter

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Type: Ethernet to Fiber Optic Converter Operating Temperature: 0 to 50 Degree Physical Dimension: 97 * 70* 26 mm Mounting Type: Wall mount Single-Mode 10/100Base-TX to 100Base-FX, RJ45 To SC, Fiber Transceiver Up to 25KM (1 Pair) 		

SECTION-6

Technical Specification Compliance Statement

Minimum Specification of 20Km SFP Module

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Range: 20KM 1.25G 1310 Single Mode Single Fiber SFP Module - Pair		

SECTION- 7 Technical Specification Compliance Statement

Minimum Specification of 80Km SFP Module

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Type: SFP+ Compatibility: Multi-Vendor MSA Compatible Tx/Rx Wavelength: 1550 nm. / 1550 nm. Media Type: Single-Mode Fiber (SMF) Optical Budget: 23 dB Max. Distance: 80 km Data Rate: 1.25-10.31 Gbps Temperature: Standard 0°-70°C		

SECTION-8

Technical Specification Compliance Statement

Minimum Specification of PON Module

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Usage/Application: OPTICAL LINE TERMINAL USES		
Phase Type: Single Phase Voltage: 220 V		
Frequency: 50 Hz Power		
Source: Electric		
Material: Aluminum		
Packaging Type: Box		

SECTION- 9 Technical Specification Compliance Statement

Minimum Specification of 4 Port OLT

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Layer 3 OLT brand		
Support 10G Uplink		
□ Support WEB, CLI and EMS		
Support unify management of data		
VoIP, WiFi and CATV service.		
It can support 256 ONUs under 1:64 splitter ratio.		

SECTION-10

Technical Specification Compliance Statement

Minimum Specification of Optical Network Unit (ONU)

Qty.	28 Nos.
Make	
Model	
Part No	

	Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Special Feature	QoS, Remote Access		
Compatible Devices	Personal Computer, Laptop, TV, Smartphone	-	
Frequency Band Class	Dual Band		
Antenna Type	Fixed		

SECTION-11

Technical Specification Compliance Statement

Minimum Specification of CAT-6 CABLE

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Cat6 U/UTP 4 pair Outdoor Cable, solid bare copper with cross filler pair separator exceeding TIA 568-C.2 standard		
Horizontal Cabling Category 6 shall be 23 AWG, 4 Pair UTP, Outdoor double jacketed		
Inner Jacket - Polyethylene (PE)		
Outer jacket - LSZH		
<14 Kg		
Tested upto 250 MHz		
7.2 mm		
305 Mtr Reel		
<=9.38 Ohms / 100 Mtr		
<45 ns		
-20 to +70 Deg C		
Must be ROHS/ELV compliant		
Offered product OEM shall be member of global TIA committee. Membership shall be available for verification at www.tiaonline.org/about/member-list	-	
OEM Should be ISO9001 and ISO14001 certified		
for design, Development for LAN & WAN product.		
Cabling OEM shall have ISO 9001 & 14001 manufacturing facility in India functioning for min 10 years.		

SECTION-12

Technical Specification Compliance Statement

Minimum Specification of HDMI Cable

Qty.	28 Nos.
Make	
Model	
Part No	

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

Length: 10 m Speed: High-Speed HDMI Cable
Supports : Ethernet, 3D, 4K and Audio Return, With Gold Plated connector,
Material:100%PureBareCooperconductorensureHighestqualitytransmission
Compatible Device:Compatible with TV,COMPUTER,PHONE,PROJECTOR,MONITOR, LED, LCD, Black, One Cable)

SECTION-13

Technical Specification Compliance Statement

Minimum Specification of Extension USB Cable

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 4 in 1 Ultra Slim USB Hub 2.0,1.2 Meter(4 feet) Cable, Transfer Speed of 480MBPS, Universally Compatible with All USB PC Speaker Laptop Hard Drive Keyboard Printer Pen Drive 		

SECTION-14

Technical Specification Compliance Statement

Minimum Specification of 27u Network Rack

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)	
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- **Dimension**: 60 x 100 x 131 cm; 80 Kilograms
- Compatible Devices:Server
- Batteries Included:No
- Batteries Required:No
- Material: Alloy Steel
- Mounting Type: Floor Mount

SECTION-15

Technical Specification Compliance Statement

Minimum Specification of Wireless keyboard & Mouse

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Colour: Black		
Connectivity Technology: USB		
Special Feature: Wireless, Ergonomic, Optical		
Compatible Devices: Computer, Laptop		

SECTION-16

Technical Specification Compliance Statement

Minimum Specification of UPS

Qty.	28 Nos.
Make	
Model	
Part No	

Sl No	Minimum Specification		Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
1	UPS Capacity	1 kVA UPS System (1Ph Input /1Ph Output)		
2	Topology	True On-line Double Coverstion UPS		
3	Output power capacity	.8KW (800 Watt)		
4	Input			

4.1	Voltage Range	110 - 300 VAC based on the load percentage		
4.2	Frequency	50 Hz		
	Frequency	45 to 55 Hz		
	Range			
4.3	Power Factor	\geq 0.99 at full load and nominal input Voltage		
4.5	Current THD	< 5%		
5	Output			
5.1	Voltage	230 VAC		
	Voltage			
5.2	Regulation	+/-1%		
F 0	Frequency (Free			
5.3	Running Mode) Frequency	$50 \text{ Hz} \pm 0.1 \text{ Hz}$		
	(Synchronisation			
5.4	Mode)	45 to 55 Hz		
	Harmonic			
5.5	Distortion (THD)	$\leq 2\%$ (linear load)		
		\leq 5% (non-linear load)		
	Output			
5.6	Waveform	Sine wave		
5.7	Crest Factor	3:1		
5.8	Inverter Efficiency	> 90%		
5.0 5.9	Power Factor			
		0.9 Lagging		
5.10	Overload	101% - 109% for 5 minutes		
		110% - 129% for 1 minute		
		130%-150% for 10 Sec		
5.11	System DC Voltage	≥ 36 VDC	26 MD C	
-				
6 6.1	Battery Battery Type			
-		12 V Sealed Lead Acid Maintenance Free		
6.2	Battery make	Exide/ Quanta with Build in Battery.		
6.3	Battery charging	Constant Current & Constant Voltage	30 Mins Backup	
6.4	Back up time	-		
0.5	C 1	Built-in solid state float-cum-equalizing		
6.5	Charger	charger with		
		automatic boost / trickle charge modes with		
	VAU De metro d	current limiting features. ≥ 1008		
6.6	VAH Required	2 1000		
7	Efficiency			
	AC/AC (overall efficiency)	$\geq 85\%$ (at full Load)		
8	Features			
8.1	Eco mode			
	Overload	Available		
8.2	Cverload	Available		
8.3	Converter mode	Available		
8.4	Bypass	Available		
	parameters			
	configurable			
8.5	Display	LCD Display		
9	Mechanical			
	Ingress	IP 20		
	protection			
10.6	Bypass	Static Bypass		
	Maintenance			
10.7	Bypass Certifications	Available		
12				
12.1	ISO 9001 : 2008			
12.3	ISO 14001 : 2004			

12.4	BIS Certificate		
12.5	PEP Certificate		
13	Warranty	3 Years on UPS & 3 Years on Battery from date of supply.	
14	Service purpose	UPS OEM should have toll free number facilities for all type service call logging support.	
15	Criteria	UPS OEM should have at least minimum 10/12 owned Service Centers across West Bengal (Where Spare & Parts stock availabe and UPS will repaire instant)	
		UPS OEM should have single PO Copy & supplied 1000 Units Online UPS in any Govt.project through System Integrator during last 2 (two) years	
		UPS OEM should have 500 CR turnover consecutive last 3 financial Years	
		UPS OEM should have own Factory premises in India	

SECTION-17

Technical Specification Compliance Statement

Minimum Specification of 43'' LED TV

Qty.	112 Nos.
Make	
Model	
Part No	

S1. No.	Section	Parameters	Features	Specification (Quoted / Applicable – by the bidder)	Complied (Yes/ No)
1	Display	Inch	43" or higher		
2		Resolution	3,840 X 2,160 (UHD)		
3		Backlight Unit Type	Direct		
4		Brightness (cd/m2)	300 or higher		
5		Dynamic Contrast Ratio	1,000,000:1 or higher		
6		Refresh Rate	60 Hz		
7	VIDEO SYSTEM	HDR (10 Pro / HLG)	Yes / Yes		
8	AUDIO	Audio Output	10W + 10W		
9	BROADCASTING SYSTEM	Digital (Terrestrial, Cable, Satellite)	DVB-T2/C		
10	SW COMPABILITY	Control / Control Plus, CN	MS(Premium), Simple Editor		
11	SIGNAGE FEATURE	Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certificated, Crestron Connected (Network Based Control), DPM (Digital Power management), Time scheduler, RTC (Real Time Clock), NTP sync timer, BEACON, Embedded CM (contents manager), Embedded GM (Group manager)			
12	SMART FEATURE	Smart Home (Launcher Bar), Web Browser, Pre-loaded App, SDP Server compatibility, Mood Display, Soft AP, WiFi (Version) (802. 1 lac), Screen Share (Miracast), Smart Share, Bluetooth Audio Playback, HDMI-ARC (ARC, HDMI2), Vertical Setup, Fail Over, Play Via URL, NTP Server Setting, CISCO Certi. Compatibility			
13	KEY FEATURE		e Channel Map, IP Channel er Out (Int Variable/Fixed, ded Type)		
14	JACK INTERFACE	Set Side	HDMI In (3 (2.0)), Headphone Out (Phone Jack Type), RS- 232C(D-Sub 9pin / Phone jack) (Phone Jack, 4pin)		
15		Set Rear	USB (2.0), RF In, Digital Audio Out (Optical), External Speaker Out(3.5mm phone jack), RJ45 (Usage Purpose) (LAN)		
16	POWER	Voltage, Hz	100 ~ 240 V, 50/60 Hz		
17	1	Power Consumption (Typ.)	98W or less		
18	1	Stand-by	Under 0.5W		
19	CERTIFICATION	Standard	BIS		
20	1	Safety	CB / CU TR		
21	1	EMC	CE		
22	Warranty	3 Years	•		

SECTION- 18 Technical Specification Compliance Statement

Minimum Specification of Desktop

Qty.	56 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Processor: CPU- Intel @ Core i7- 12 th Gen or higher/ Equivalent AMD Memory: RAM- 16 GB DDR4-3200 M Hz or Higher Hard drive: Storage – 512 GB PCIe NVMe TM TLC M.2 SSD Operating System: Win 11 Prof, MS office Display: 24 inch 5MP FDH or Higher, IPS panel Chipset: Intel Q670 or Higher/ Equivalent AMD USB ports etc:1x HDMI, Min. 3x USB 10Gbps, Wireless Keyboard and Mouse Combo/ Intel Iris Graphics/ IR Privacy Camera Chassis:Yes Warranty:3 Years Onsite		

SECTION-19

Technical Specification Compliance Statement

Minimum Specification of 22'' LED MONITOR

Qty.	56 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Hardware Interface: VGA, HDMI		
Response Time: 5 Milliseconds		
Resolution: FHD 1080p		
Special Features: Flicker-Free		
Mounting Hardware: 1 Unit of Monitor, 1 Unit of adapter & cable		
Display Technology: LED		
Standing screen display size: 22 Inches		
Display Type: IPS		
Colour Screen: No		
Viewing Angle: 178 Degrees		
Image brightness: 250 cd / m²		
Aspect Ratio: 16:9		
Screen Resolution: 1920 x 1080		
Resolution: 1080p Full HD		
Wattage: 25 Watts		
Batteries Included: No		
Batteries Required :No		
Refresh Rate: 60 Hz		
Connector Type: VGA, Auxiliary, DVI, HDMI		
Mounting Type: Desk Mount		
Actual viewing angle: 178 Degrees		
Has Auto Focus: No		
Programmable Buttons: No		

SECTION-20

Technical Specification Compliance Statement

Minimum Specification of All in One Printer

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Product Type Laser printers		
Functions Print scan copy and fax		
Connectivity AirPrint [™] , Ethernet networking, USB, Wireless (Wi-Fi®)		
Connectivity, Standard 1 Hi-Speed USB 2.0; 1 rear host USB; 1 Front USB port; Gigabit Ethernet LAN 10/100/1000BASE-T network; 802.3az(EEE); 802.11b/g/n / 2.4 / 5 GHZ Wi-Fi radio + BLE		
Network Capabilities Gigabit Ethernet 10/100/1000BASE- T network; 802.11b/g/n; 2.4/5 GHZ Wi-Fi radio		
Wireless Capability Yes, built-in dual-band Wi-Fi; Authentication via 802.1X; Wi-Fi Direct; Bluetooth Low-Energy		
Mobile Printing Capability Apple AirPrint™; Mopria™ Certified; Wi-Fi® Direct Printing; Optional ROAM Queue Printing; HP ROAM For Business		
Network Protocols, Supported TCP/IP, IPv4, IPv6; Print: TCP-IP port 9100 Direct Mode.		
Plug And Play Auto Wireless Connect; Easy wireless setup. Display 6.9 cm (2.7) intuitive color touchscreen (CGD) Display Area (Metric) 5.4 x 4.05 cm		
Scan Speed (Normal, Letter) Up to 31 ppm (b&w), up to 21 ppm (color)		
Scan Speed (Normal, A4) Up to 29 ppm (b&w), up to 20 ppm (color)		
Cartridge & Printer heads Technology Laser		
Number Of Print Cartridges 1 (black)		
Copy Speed (Black, Normal Quality, A4) Up to 35 cpm Copy Speed Black (Normal, Letter) Up to 37 cpm Copy Speed Black Duplex (A4) Up to 31 cpm		
Copy Speed Black Duplex (Letter) Up to 33 cpm		
Power 110-volt input voltage: 110 to 127 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz) (Not dual voltage, product varies by part number with # Option code identifier)		

Digital Sending Standard Features Scan to email; Scan to PDF, Scan to computer with software	
Storage Device And Direct Print Support Wireless direct printing; Optional job storage via external rear host USB port (Minimum 16GB); Walk-up USB printing	
Duty Cycle (Monthly, Letter) Up to 80,000 pages	
Duty Cycle Note Duty cycle is defined as the maximum number of pages per month of imaged output.	
Envelope Feeder No Functions Print, Copy, Scan Internal Storage No	
Paper Trays, Maximum 3	
Duty Cycle (Monthly, A4) Up to 80,000 pages	
Paper Trays, Standard 2	
Duplex Printing Automatic (default)	
Memory Card Compatibility No	
Print Colours NO	

SECTION-21

Technical Specification Compliance Statement

Minimum Specification of Antivirus

Qty.	28 Set
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Works on: Windows 11, 10, 8.1 fully patched (32- and 64- bit) Number of Users: 2 User ; Validity: 3 Years 		

SECTION-22

Technical Specification Compliance Statement

Minimum Specification of 16 Channel IPBEX

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
 Telephone Type: Corded Power Source: Corded Electric Dialer Type: Single Keypad Intercom (extn. to extn. call between 8 Intercoms) Call transfer, call hold and busy transfer Call Pick-up form any extension 		

SECTION-23

Technical Specification Compliance Statement

Minimum Specification of Telephone IP Phone Receiver

Qty.	280 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Compatible Devices: SIP Line , IPPBX , VOIP Call		
Standing screen display size: 2.48 Inches Display		
Type: LCD		
Power Source: Corded Electric		
Batteries Included: No		
Batteries Required: No		
Mounting Type: Desktop		

SECTION-24

Technical Specification Compliance Statement

Minimum Specification of CCTV Camera with audio

Qty.	56 Nos.
Make	
Model	
Part No	

S.NO	Parameters	Value	Specification (Quoted / Applicable – by the bidder)	Compliance (Yes/ No)
1	Type of Camera Housing	Bullet		
2	Camera Type	IP Based		
3	Image Sensor Type	CMOS		
4	Image Sensor Size	0.370 or better		
5	Camera Image Sensing	4 MP or better		
6	Resolution	2688 x 1520		
7	Day/Night Capable	Yes		
8	IR illumination Range(mtr)	120 or better		
9	Lens Type	Fixed Iris		
10	Focal Length(mm)	3.6mm or as per the site		
11	Mount Type	M12		
12	Frame Rate (fps)	Main stream (2688 × 1520@1–25/30 fps) ; sub stream (704 × 576@1–25/30 fps) ; third stream (1280 × 720@1–25/30 fps)		
13	Video Compression	H.265 & H.264		
14	Video Streams	Tri-Stream or better		
15	Digital Zoom	10x or Better		
16	Number of Audio Input Channel	l for external MIC / built-in Mic		
17	Number of Audio Output Channel	1 (RCA)		
18	Alarm Support	Yes		
19	Number of Alarm Input	l or Better		
20	Number of Alarm Output	l or Better		
22	Multi Level User ID/Password	Yes		
23	IP Address Filtering	Yes		
24	Minimum Illumination for Capturing Color Image	0.005 Lux@F1.6 Or Better		
25	Electronic Shutter Speed(sec)	1/3 s-1/100000 s		
26	WDR (Wide Dynamic Range)	120 db or better		
27	SNR (Signal to Noise Ratio)	>49 Db or better		
28	White Balance	Yes		
29	Auto Gain Control	Yes		
30	Back Light Compensation	Yes		
31	Remote Administration	Yes		
32	ONVIF Support	Profile S,Profile G		
33	Privacy Zones	4		

34	Supported Protocols	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; SNMP; QoS; UPnP; NTP; CGI	
35	Max supported SD Card	512 GB or better	
36	Protection	IP67 or better	
37	Mounting Type	Wall	
38	Power Input	12V DC/POE	
39	Min. Operating Temperature	-40 deg C	
40	Max. Operating Temperature	55 deg C	
41	Relative Humidity Non Condensing (%)	less than 95%RH	
42	Warranty	2years	
43	IVS	Tripwire, Intrusion (Recognition of human and vehicle)	
44	Certification	CE, FCC, RoHS, BIS, Onvif	

SECTION-25

Technical Specification Compliance Statement Minimum

Specification of Biometric attendance Control

Qty.	28 Nos.
Make	
Model	
Part No	

Minimum Specification	Specification (Quoted / Applicable – by the bidder)	Complied (Yes / No)
Type & Connectivity: Fingerprint, card & pin authentication with Wifi connectivity. Cloud Compatible attendance device		
User Capacity: Upto 19000 fingerprint template & upto 180000 transaction capacity		
Ports: TCP/IP, Wi-Fi.		
Compatible: With Mobile app		
Display: 2.4 inch TFT Color Display		
Extra Feature: Device has to be professional door access control feature.		

MODERNIZED SECURED CONTROL ROOM

1. CCTV Control Room.

- 1. All the CCTV Camera feed view in TV screens & Video Wall via NVR.
- 11. NVR wise Video Wall separation.
- 111. Preview of CCTV Cameras.
- IV. 24x7 Monitoring system.
- V. Area wise segregation.
- Vl. LAN based system.
- Vll. Secured VMS.

2. Media Monitoring.

- 1. TV Screens for Media Monitoring.
- 11. Social Media Monitoring via Desktop.
- 111. 24x7 Monitoring system.

3. Official Works.

- 1. Official mail access in Desktop.
- 11. Desktop network sharing.
- 111. Printer network sharing.
- iv. Antivirus protected.

4. EPEBX Control Room.

- 1. Telephonic internal interaction.
- 11. Remote access.
- 111. Speed dial.

5. Security in Control Room.

- 1. Secured with Biometric Access Control Device for entrance.
- 11. CCTV Camera inside Control Room.
- 111. Camera with Two Way Talk Back & Motion Detection sensors.

6. The vendor will supply all the other required materials from their own.

- 7. Product requirements will vary District & Commissionerate wise.
- 8. Camera brand will vary District & Commissionerate wise.
- 9. VMS will vary District & Commissionerate wise.
- 10. Control Room size and arrangement must vary District & Commissionerate wise.
- 11. Total required qty may vary at the time of placement of order.