

# অসম লোকসেৱা আয়োগ

# **ASSAM PUBLIC SERVICE COMMISSION**

Jawaharnagar, Khanapara, Guwahati-781022.

No.170PSC/Sty-2/2012-2013

Dated Guwahati 26<sup>th</sup> Dec./ 2022

# NOTICE INVITING RE-TENDER FOR SUPPLY, INSTALLATION & COMMISSIONING OF IP C.C.T.V. SYSTEM IN THE APSC BUILDING

Sealed tenders affixing Court Fee Stamp of Rs. 8.25 (Rupee eight and twenty five paise) only are invited by the undersigned from registered and well experienced Manufacturer/Authorised Dealer/Supplier/Company/Firm for Installation & Commissioning of CCTV system and supply of related hardware in the office of the Assam Public Service Commission.

The quoted rates should be inclusive of all taxes, packing & forwarding, Installation & Commissioning of the system at office of the APSC, Khanapara, Guwahati-22.

The tender complete in all respect should reach the undersigned on or before 10/01/2023 by 02:00 PM and the technical bids will be opened at 03:00 P.M. on the same date & place in presence of the tenderer or their representative.

Details of tender may be downloaded from the Commission's official website <a href="www.apsc.nic.in">www.apsc.nic.in</a> and State Public Procurement Portal, <a href="https://sppp.assam.gov.in">https://sppp.assam.gov.in</a> It is to be noted that all further updates or amendments if any regarding the tender dates, specifications and terms and conditions shall be notified and uploaded on the Commission's website and the State Public Procurement Portal. Therefore, interested bidders need to visit the website on a regular basis for such updates.

Sd/-Secretary Assam Public Service Commission Jawaharnagar, Khanapara, Ghy-22

Website: www.apsc.nic.in E-mail: apsc-asm@nic.in

# <u>DETAILS OF NOTICE INVITING RE-TENDER FOR SUPPLY, INSTALLATION & COMMISSIONING OF IP CCTV SYSTEM IN APSC BUILDING</u>

# INVITATION FOR TENDER

This invitation of Tender is for Supply and installation/laying of active and passive components/equipment for IP CCTV system of Assam Public Service Commission (APSC) and commissioning the CCTV system.

In this connection Sealed Tenders are invited in two cover system (i.e., Technical bid and financial bid) subject to the following terms and conditions, from the intending bidders to reach this office on or before 10/01/2023 at 2.00 PM. The tender (Technical bid) will be opened on the same day in the presence of bidders or their authorized agents who may choose to be present. The financial bid of only such bidders whose technical bid is accepted shall be opened on a later date.

The Committee reserves the right of accepting and/or rejecting any/all Quotations without assigning any reasons thereof. This authority is not under any binding to accept the lowest price quoted by the firms.

### INSTRUCTIONS TO TENDERERS

### **Procedure for Submission of bids**

Sealed Bids in TWO separate sealed Envelopes indicating clearly 'Envelop - No.1 - Technical bid' and 'Envelope No.2 - Financial bid' shall be addressed to "Secretary, Assam Public Service Commission, Jawahar Nagar, Khanapara, Guwahati-781022" and Envelops should also be super scribed 'Supply, installation, testing & commissioning of IP CCTV system at the APSC' and name of the firm. Both the envelopes shall be submitted in one sealed envelope super scribed Name and address of the firm and tender reference. Last date for submission of tenders is 10/01/2023 by 2.00 PM and the technical bid will be opened at 3.00 P.M on the same day.

### **Documents Comprising the Quotations**

Envelope no. 1 shall contain:

- a) "Technical bid" of tender with every page signed and stamped.
- b) An earnest money deposit (EMD) of Rs. 50,000/- (Fifty thousand only) must be submitted with the technical bid by way of Demand Draft (DD) from Nationalised/Scheduled Bank, drawn in favour of "Assam Public Service Commission payable at Guwahati", to be submitted in a separate envelop. EMD envelop shall be super scribed as EMD Supply, installation, testing & commissioning of IP CCTV system at APSC, Khanapara.

Envelope no. 2 shall contain:

- a) Financial Bid shall be addressed by name to "Secretary, Assam Public Service Commission, Jawahar Nagar, Khanapara, Guwahati-781022"
- b) Envelope No.2 shall not contain any condition whatsoever and any conditional bids shall be rejected.
- c) Envelope No.2 will be opened on some suitable date, after scrutiny of the documents submitted by tenderers in envelope 1.

Financial Bid envelopes shall be opened only in respect of those tenderers who is found to be eligible as per the prequalification criteria specified in the NIT and have complied with all the requirements in tender document.

### FORM OF TENDER

Secretary
Assam Public Service Commission
Jawaharnagar, Khanapara, Guwahati-22

Dear Sir/Madam

# Notice inviting tender – Supply, installation, testing & commissioning of IP CCTV system at office of the APSC, Khanapara.

- 1) I / We have examined the Scope of Works, Specifications and Schedule of Quantities and Terms and Conditions relating to the tender for the said works.
- 2) I / We have visited the site, examined the site of works specified in the Tender Document and acquired the requisite information relating thereto as affecting the Tender.
- 3) I / We hereby offer to execute and complete the works in strict accordance with the Tender Document at the item rates quoted by me / us in the attached Schedule of Quantities in all respects as per the specifications and Scope of Works described in the Tender Document and the Annexures containing Terms and Conditions.
- 4) I / We enclose herewith interest-free Earnest Money Deposit (EMD) for Rs.20,000/- (Rupees Twenty Thousand Only) by Demand Draft payable at Guwahati in favour of "Assam Public Service Commission" and the sum shall be forfeited in the event of our withdrawal of Tender before expiry of the validity period of offer and/or in the event of our failure to execute the Contract when called upon to do so by accepting our Quotation.
- 5) In the event of this tender being accepted, I/We agree to enter into and execute an Agreement with APSC.
- 6) The rate quoted by me / us is inclusive of all taxes like GST, Income Tax, etc.
- 7) The rates quoted by me / us are firm and shall not be subjected to variations on account of fluctuation in the market rates, taxes or any other reasons whatsoever.
- 8) Should this tender be accepted, I / we hereby agree to abide by and fulfil all the Terms and Conditions and Provisions of the said Contract Document annexed hereto.

Name of the person authorized to sign and submit	the Tender	
)		
Ď		
,		
Place: Date:		

Yours faithfully Signature Seal

## **Pre-Qualification Criteria**

Minimum Eligibility Criteria for pre-qualification of tenderers is as follows: The Bidding Firm/Company:-

- 1) Should have at least 05 years of experience in the field of IP CCTV systems.
- 2) Should have successfully completed in last 05 Years, in the field of IP CCTV systems for government buildings, Banks/FIs premises, reputed private organizations etc.
- 3) Should submit minimum 3(Three) Work/Purchase orders and Completion certificates relating to IP CCTV system issued by the client should be enclosed with the Quotation
- 4) Should not have been barred by any PSU/Govt. Dept. in doing business with them. (Please submit self-declaration).
- 5) Should have annual turnover of at least 25 lakh (Twenty five lakh) per annum during last three years.
- 6) Should submit audited balance sheets / P&L account and Income Tax Return certificates for the last 3 financial years. Document related to Average Annual Financial Turnover along with balance sheet should be certified from Chattered Accountant (CA).
- 7) Should submit updated and valid trade license, PAN details, GST registration certificate, ISO certificate and all relevant up to date tax clearance certificates.
- 8) Should have its base in Assam and must be incorporated & registered under Companies Act/Societies Registration Act/Firm registration act/Trust Act and should be in operations for minimum of last 3 years in the relevant field. (submit Proof of Registration).
- 9) Should have technical staff capable of attending service calls & coordinate with OEM for repair/shifting work is to be taken urgently. The bidder should have on role technical employees.(Details have to be submitted)

# **Earnest Money Deposit**

An earnest money deposit(EMD) of **Rs. 50,000/-(Fifty thousand only)** must be submitted with the technical bid by way of Demand Draft (DD) from Nationalised/Scheduled Bank, drawn in favour of "**Assam Public Service Commission payable at Guwahati**", to be submitted in a separate envelop. EMD envelop shall be super scribed as EMD Supply, installation, testing & commissioning of IP CCTV system at APSC, Khanapara. The Tender without EMD shall be rejected out rightly. No interest shall be paid on the EMD thus collected.

EMD of the successful bidder shall be returned after the warranty period is over, whereas EMD of the unsuccessful bidders will be returned upon the issuance of work order and acceptance of the same by the successful bidder. The EMD will be forfeited in following cases:

- a) If the bidder fails to accept the order based on his/her offer (bid) and within the prescribed time.
- b) If the bidder fails to supply the material with specifications in compliance to as mentioned in Technical Specifications. c) If the bidder delays supply beyond a reasonable time resulting in disruption of APSC works.

### Warranty period

The items covered by the schedule of requirement shall carry minimum 24 months (two years) onsite comprehensive warranty from the date of installation, service support and two years product warranty of all cameras, NVR and HDD product by OEM of the equipment's. Warranty shall include free maintenance of the whole equipment supplied including free replacement of parts. The defects, if any, shall be attended to on immediate basis but in no case, any defect should prolong for more than 24 hours.

The defects, if any, during the warranty period are to be rectified free of charge by arranging free replacement wherever necessary.

## Scope of work

The scope of work shall include the following.

- 1) Supply, installation, testing and commissioning of IP CCTV System at Assam Public Service Commission, Jawahar Nagar, Khanapara, Guwahati-781022.
- 2) A network, comprising of 24 port and 8-port PoE+ switches connected with CAT6 and OFC, shall be laid for transmission of signal from cameras to the Control Stations. The Main Control Station shall for Video Storage and further Control.
- 3) The CCTVs Surveillance System need to be functional on 24x7 basic i.e. 24 hours all the days and need to have at least 30 days data storage capacity for all CCTVs.
- 4) The vendor will liaison on behalf of APSC, with other different OEMs for repairing of equipment(s) and all other accessories during warranty period.
- 5) Bidders should share all the relevant firmware/OS/Patches etc. as and when they are released by OEM during entire warranty period at no cost to APSC.
- 6) Delivery of entire materials to APSC, Khanapara including packing, handling, transporting, clearing, loading/unloading.
- 7) We are having Optical Fibre Cable (OFC) to run Internet/Intranet Facility at the APSC. All the bidders are requested to survey the sites before quoting for existing network as well as new requirements if any that may arise.
- 8) The contractor shall provide the APSC with details of the training required by personnel to operate and maintain the CCTV system along with proper diagrams and documentations of the IP CCTV system.
- 9) Providing all-inclusive service including all spares, etc. during warranty period.
- 10) All engineering, equipment, labour, and permits required to satisfactorily complete the work required by this Specification.
- 11) Any other work related to but not specifically mentioned above, required for completion of the job as per the intent and scope of work.

# **Validity of Bid**:

The bids submitted shall remain valid for a period of 180 days from the date of the opening of the bids.

#### Amendment of bid documents

- 1) At any time, prior to the date of submission of bids, the purchaser may for any reason modify the Bid documents.
- 2) The amendment, if any will be notified on the APSC's official Website. Bidders are advised to visit the website for updates on regular basis.

### Firmness of rates

The rates quoted in the tender/offer shall be for the complete item including supply, installation, testing & commissioning at site. The rates quoted in the tender shall include all charges for packing, transport, loading, unloading and for delivery at site. The rates shall also be firm during the period of contract including extended period if any and rates shall not be subject to exchange variation, labour conditions, and fluctuations in railway freights, taxes or any conditions whatsoever.

Tenderers must include in their rates GST, sales tax, excise duty, entry tax or any other tax and prevailing duty or other levy as existing, levied by the Central Government or any State Government or Local Authority, transportations charges etc. if applicable.

No claim in respect of increase in GST, sales tax, works contract tax (WCT), excise duty, or any other tax, duty or levy during the duration of the contract shall be entertained by the APSC. The same will remain firm during the contract period.

# Purchaser's right to accept any bid and to reject any or all bids

The Purchaser does not bind to accept the lowest or any other tender/bid and has the right to cancel the bidding process and reject all bids at any time prior to award of the contract without assigning any reasons whatsoever and without thereby incurring any liability to the affected bidder on the grounds for the Purchaser's action.

### **Award of contract**

The Authority will award the Contract to the successful bidder whose bid has been determined to be substantially responsive and has been determined as the best bid, provided further that the Tenderer is determined to be qualified to perform the Contract satisfactorily. The Authority shall however not bind itself to accept the best bid or any bid and reserves the right to accept any bid, wholly or in part. Bidder should have to qualify all the terms and conditions and eligibility with proper supporting documentation.

## Notification of successful bidder

Purchaser will notify the successful bidder in writing by registered letter or e-mail, to be confirmed in writing by registered letter that its bid has been accepted. The notification of the award will constitute the formation of the contract.

# Signing of contract

The successful bidder shall execute an agreement on non-judicial stamp paper with APSC within 15 days from date of issue of work order failing which the bidder's EMD may stand forfeited.

#### **Time of Completion:**

The work shall be completed within 6 to 8 weeks from the date of issue of work order.

### **Completion Certificate:**

Work Completion certificate shall be issued only after completion of work in all respect and to the entire satisfaction of APSC

#### Payment of bills

Payment will be made after the completion of all works subject to the satisfaction of the APSC. On completion bills/invoices should be submitted in triplicate to the **Secretary, Assam Public Service Commission**. No advance payment will be made.

#### Training

Upon completion of the installation & commissioning the Successful Bidder shall provide the hands-on training on the installed equipment to the concerned officials along with the training materials on the equipment installed at APSC.

# **Documentation:**

The CCTV system contractor, upon completion of all the activities, shall offer the system to the customer for acceptance. For this, the contractor shall provide the customer with the following documentation:

- 1) Copy of detailed report
- 2) Component and equipment list
- 3) Product description sheets
- 4) System design drawing(s)
- 5) System schematic diagram(s)
- 6) System operating manual
- 7) Original licensed copies of all the software

### **Technical Bid Details**

The Technical bid must be accompanied with the following documents each page of which must be signed by the bidder with stamp affixed.

- 1) Non refundable court fee stamp of Rs. 8.25 (Rupess eight & twenty five paisa) only to be affixed to the tender document.
- 2) An earnest money deposit(EMD) of Rs. 50,000/-(Fifty thousand only) must be submitted with the technical bid by way of Demand Draft (DD) from Nationalised/Scheduled Bank, drawn in favour of "Assam Public Service Commission payable at Guwahati", to be submitted in a separate envelop.
- 3) GST Registration Certificate.
- 4) Vendor Profile (Annexure-II)
- 5) Self declaration (Annexure-III)
- 6) Valid trade license, PAN, ISO certificate.
- 7) Income Tax Registration Certificate/PAN No. and latest Income Tax Clearance Certificates.
- 8) Undertaking of after sales service and contact details of the same along with the list of technical staff capable of attending service calls & coordinate with OEM for repair/shifting works.
- 9) Documents related to experiences of executing similar work along with Annexure-V.
- 10) Turn over details (Annexure-IV) along with audited Balance Sheet and Profit and Loss Account for past three years.
- 11) Compliance of Technical Specifications of the IP CCTV system along with Technical literature/datasheet/leaflet and standard certificates shall be submitted.
- 12) Any other documents, which are not mentioned in above list but required as per terms and conditions of the tender document.
- 13) The Procurement and Tender selection Committee reserves the right to accept or reject any or all the tenders without assigning any reason thereof.

Sd/-Secretary Assam Public Service Commission Jawaharnagar, Khanapara, Guwahati-22

# ANNEXURE-I

# <u>Details of items and quantity required</u> To be filled up by the tenderer

					Technical	
Sl. No.	Items	Qty.	Uom	Make and model	Compliance as per Specs. (yes/no)	Warranty in years (if applicable)
1	5 Mega Pixels IP Dome Camera	13	Nos.			
2	5 Mega Pixels IP Bullet Camera	3	Nos.			
3	32 Channel Network Video Recorder (NVR)	1	Nos.			
	24 Port Gigabit PoE+ switch with 4 SFP uplink	1	Nos.			
	8 Port Gigabit PoE+ switch with 2 SFP uplink	6	Nos.			
	4TB SATA 24X7 Surveillance Specialized HDD	4	Nos.			
7	1000BaseT to 1000BaseLx (10Km) Single mode Media converter (Branded)	4	Nos.			
8	6 KVA Online UPS with 60Min Backup	1	Nos.			
9	43" or more LED Commercial Display (16 x 7 operation)	3	Nos.			
10	CAT6 4 pair UTP cable 305M	2	Box			
11	RJ 45 Connectors for CAT6 termination (100)	1	Box			
12	17U Floor standing Rack with all accessories for NVR, switches and passive components	1	Nos.			
	6U wall mount rack with all accessories for switches and passive components	2	Nos.			
14	3 core 2.5mm branded electrical cable	180	Mtrs.			
15	5AMP switch & 3 pin socket	9	Nos.			

Signature:	
Name:	
Designation:	

<u>Minimum required specifications for 5MP IP Dome Camera</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Feature	Specification	Compliance (Yes/No)
1	Image Sensor	1/2.7" CMOS	
2	Lens Type	2.8 mm	
3	Resolution	5MP (2560x1920)	
4	Minimum Illumination	0.03 lux color @ F2.0, 0 lux B/W with IR LEDs on @ F2.0	
5	IR Distance	Up to 50m IR range	
6	Electronic Shutter Speed	1/5 ~ 1/32,000	
7	Day/Night	Auto/Day/Night/Schedule	
8	Noise Reduction	3D DNR	
9	Backlight Compensation	WDR, HLC	
10	Edge Base Storage	Micro SD, Up to 256GB	
11	Video compression	H.265/H.264/Smart Codec/MJPEG	
12	Video Streaming	Triple stream support	
13	Supported Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, DHCP, NTP, DNS, DDNS, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS	
14	Compatibility	ONVIF Profile G/S	
15	Operating temperature	-10°C - 60°C	
16	Relative humidity	0-90%, non-condensing	
17	Cyber security	User account and password protection HTTPS, IP Filter, Digest authentication, User access log, TLS1.2 only, AES- 128/256, PCIDSS compliance	
18	Housing	IP66,IK10,Metal Body	
19	Power Supply	12 V DC, PoE	
20	Power Consumption	<11.4W	
21	Certificates	UL(UL 60950-l),FCC,CE,RoHS(EN 50581)	
22	Product OEM Should not b	be blacklisted or banned in India & Globally	

<u>Minimum required specifications for 5MP IP Bullet Camera</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Feature	Specification	Compliance (Yes/No)
Image Sensor	1/2.7" CMOS	
Lens Type	4.0mm, Fixed, F2.0	
Resolution	5MP (2560(H) x1920(V))	
Minimum Illumination	0.03 lux color @ F2.0, 0 lux B/W with IR LEDs on @ F2.0	
IR Distance	Up to 50 m	
Electronic Shutter Speed	1/5 ~ 1/32,000	
Day/Night	Auto/Day/Night/Schedule	
Noise Reduction	3D DNR	
Backlight Compensation	WDR, HLC	
Edge Base Storage	256 GB Micro SD	
Video Compression	H.265/H.264/Smart Codec/MJPEG	
Video Streaming	Triple stream support	
Supported Protocols	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, DHCP, NTP, DNS, DDNS, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS	
Supported web browsers	Chrome 71+, Internet Explorer 11.0+	
Standards	ONVIF Profile G/S	
Cyber security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, AES-128/256, SSH/ Telnet closed, PCIDSS compliance	
Operational Temperature	-10°C - 60°C	
Relative Humidity	Less than 90%, non-condensing	
Ingression protection	IP66	
Housing	Metal	
Power Supply	12 V DC, PoE	
Power Consumption	<11.4W	
Certificates Product OEM Should not be black	UL(UL 60950-1),FCC,CE,RoHS(EN 50581) klisted or banned in India & Globally	
	Image Sensor Lens Type Resolution  Minimum Illumination IR Distance Electronic Shutter Speed Day/Night Noise Reduction Backlight Compensation Edge Base Storage Video Compression Video Streaming  Supported Protocols  Supported Web browsers Standards  Cyber security Operational Temperature Relative Humidity Ingression protection Housing Power Supply Power Consumption Certificates	Image Sensor  Lens Type  4.0mm, Fixed, F2.0  SMP (2560(H) x1920(V))  0.03 lux color @ F2.0, 0 lux B/W with IR LEDs on @ F2.0  IR Distance  Up to 50 m  Electronic Shutter Speed  1/5 ~ 1/32,000  Day/Night  Auto/Day/Night/Schedule  Noise Reduction  Backlight Compensation  Edge Base Storage  Video Compression  Video Streaming  Triple stream support  IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, DHCP, NTP, DNS, DDNS, CoS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS  Supported Protocols  Chrome 71+, Internet Explorer 11.0+  Standards  ONVIF Profile G/S  User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2 only, AES-128/256, SSH/ Telnet closed, PCIDSS compliance  Operational Temperature  -10°C - 60°C  Relative Humidity  Less than 90%, non-condensing  Ingression protection  IP66  Housing  Metal  Power Supply  12 V DC, PoE  Power Consumption

<u>Minimum required specifications for 32 Channel NVR</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Feature	Specification	Compliance (Yes/No)
1	Operating System	Embedded LINUX	
2	Processor	Quad-core embedded processor	
3	ONVIF Compliance	YES	
4	Resolution	12MP, 8MP(4K)	
5	Video Input Recording	Up to 32 channels at 1080p	
6	Record Bit Rate	320 Mbps	
7	Interface	2 HDMI;1 VGA	
8	Video Standard	PAL or NTSC	
9	Video Codec	H.265/H.264/MJPEG/MPEG4	
10	Audio Input	1 Channel Input/1 Channel Output	
11	Motion Detection	Support	
12	Alarm Event	Recording; PTZ; Tour; Alarm; Video Push; Email; FTP; Snapshot; Buzzer	
13	Internal Storage capacity	8 SATA ports; up to 8TB for each disk	
14	Backup	USB storage device, Network download	
15	Recording Mode	Schedule(Regular/Continuous, Motion Detection, Alarm); Manual;Stop	
16	Search Mode	Time/Date; Alarm; Motion Detection(MD); Exact Search (accurate to a second); Smart Search	
17	Playback	1/4/8/16 (maximum 4-ch @ 8MP,8-ch @ 4MP, or 16-ch @ 1080p simulateous playback)	
18	Protocol Support	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search, P2P	
19	Remote Control Function	Remote configuration and firmware update via web client	
20	User	128 user	
21	Network Interface	1 RJ-45 port (10/100/1000 Mbps)	
22	USB Interface	4 port USB	
23	Operating Temperature	-10°C~+ 55°C (+14°F~+131°F)	
24	Relative Humidity	10% to 90%	
25	Power Supply	DC12V/4A	
26	Certificates	UL(UL/CSA 60950-1),FCC,ROHS(EN50581: 2012)	
27	Product OEM Should not be blacklisted or banned in India & Globally		
29	Camera & NVR should be from same OEM.		

<u>Minimum required specifications for 24 Port POE Switch</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Specification	Description	Compliance (Yes/No)
1	Form Factor	19" Rack Mountable.	
2	Physical Dimensions	440 x 200 x 44 mm	
3	Architecture	Non Blocking	
4	Ports	It provides 24 10/100/1000Base-TX ports with PoE + 2 gigabit Combo ports(RJ45/SFP) + 2 gigabit SFP ports	
5	GBIC/SFP	support 2 gigabit combo ports (RJ45/SFP) + 2 x gigabit SFP Ports	
6	Management Interface	Web/SNMP/SSH/Telnet(IPv6 ready)/Console	
7	PoE	270W (PoE+ supported) with (6Kv) surge protection	
8	Port Status	Power, Link/Act, PoE	
9	Power over Ethernet	Support IEEE802.3af, IEEE802.3at 24 port PoE Interfaces, Max. PoE Wattage per Port: 30W	
10	Surge Protection.	with 6 Kv surge protection per port	
11	MAC Addresses	Supported Up to 8K MAC addresses	
12	Switching capacity	56 Gbps	
13	and forwarding rate	41.7 MPPS	
		supports upto 4K VLAN Based on 802.1Q,MAC-Based VLAN, IP-Based VLAN	
	VLAN Configuration	Protocol-Based VLAN	
14		Voice VLAN, Guest VLAN, Private VLAN	
		VLAN Mapping	
		Double VLAN Markup (Basic Q-in-Q)	
15	MAC Configuration	Support Static MAC Address, MAC Binding, MAC Filtering	
		Support Web Management	
16	Management	Support serial port management, Support TELNET management, Support SSH management	
		Support RMON 1,2,3,9 group	
17	L2 Loop Protection	support port loop detection	
1 /	L2 Loop I Totection	Support STP/RSTP/MSTP	
18	Link Aggregation	Support manual Link Aggregation, Support LACP Up to 8 maximum aggregation groups, each containing up to 8 ports	
19	QOS Support	Support WRR, SP,WFQ, Sorting Based on 802.1p, Support packet mapped to the corresponding output queue, Support to modify the packet's COS and DSCP sign, Support limit of data flow, Support statistics of data flow, Support mirroring of data flow	
20	ACL Support	Based on Standard IP Based on Extend IP Based on MAC IP Based on MAC ARP Based on time Port Filtering	

21	DHCP SNOOPING	Sumantal	
	IGMP	Supported	
22	SNOOPING	Supported	
		ICMPv6	
23	IPv6	IPv6 Neighbor Discovery	
23	II VO	MLD Snooping	
		IPv6 Telnet	
24	Port Security	Each port can be configured into isolated protected port from each other	
25	SNMP	Support SNMP protocol, Support SNMP TRAP, Support standard and private MIB	
26	Cluster Management	Cluster Support neighbor discovery protocol, Support topology	
27	OAM	Support 802.3ah, Support 802.1ag	
28	Configuration Download/Upload and Upgrade Firmware	supported	
29	Debugging Tools	Support Ping, Traceroute, Telnet client.	
30	Port mirroring /span Port	Support many to one mirroring	
		Support dynamic ARP binding to prevent ARP spoofing	
31	DHCP	Support dynamic IP,MAC port binding	
31	SNOOPING	Support stationary port connect to DHCP server, to prevent privately connect to DHCP sever	
32	AAA	Support 802.1x protocol, RADIUS , Support MAC-based 802.1X authentication, Support 802.1x guest VLAN	
33	Layer 3 Switching		
	support	Support static Route and Static ARP	
34	EAPS Protocol	Support ERPS	
35	Power	AC Input 100-240V AC. Power Cable as per Indian Standards to be Provided.	

<u>Minimum required specifications for 8 Port POE Switch</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Specification	Description	Compliance (Yes/No)
1	Ports	8 x 10/100/1000Base-TX ports & 2 x 1000Base-X SFP ports	
2	Power over Ethernet (PoE)	PoE Budget: 75W, Support IEEE802.3af and 802.3at standard	
		Spanning Tree IEEE 802.1d Spanning Tree Protocol (STP), IEEE 802.1w Rapid Spanning Tree Protocol (RSTP), IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	
3	L2 Loop Protection	Ethernet Automatic Protection Switching (EAPS)	
		Broadcast Storm Filter	
		Port Isolation, Port Self-loop Detection	
		Port Mirroring Support	

4	Multicast	Upto 256 Multicast groups
4	Muticast	IGMP Snooping
5	Switching Capacity	20Gbps
		MAC address table upto 8K
6	Mac Address	MAC Address Binding ,MAC Address Filtering
	What Hadress	MAC Address Learning control Control number of port-based MAC address learning
7	Jumbo Frame	Jumbo packets up to 10K bytes
8	VLAN	Upto VLAN 4K, Port-base & 802.1q Tag-base VLANs,VLAN Based on Protocol, IP Based /MAC-Based VLAN, Voice VLAN
		Support VLAN Mapping : Support 1:1 mapping , Support basic QinQ VLAN
9	Link Aggregation	Support Link Aggregation Up to 8 maximum aggregation groups, each containing up to 4 GE ports
10	Rate Limiting	Support Rate Limit Unit: 64kbps
11	QoS Support	Support QoS - 4 output queues on each port Support flexible queue scheduling algorithms: WRR, Q+WRR Support port-based / MAC-based /802.1p / DSCP classification
12	Access Control List (ACL)	Support ACL Support Standard IP / Extend IP / MAC IP / ARP Support 512 entries
13	Security Feature	Support Security Features - Support MAC-based 802.1X authentication, Support AAA/RADIUS authentication, Support WEB/Telnet password protection, Support Accessing privilege mode password protection
		Support Self-protection - Support CPU Self-protection
14	Management	Support Web based management, Telnet, SNMP v1/v2/v3, Support Multi-user management, Support Configuration File Download/Upload via WEB
15	LED Indicators	Support LED Indicators PWR, PoE, 1000M and Link/Act LED
16	Power	Support Input voltage 100V~240V AC, 50/60Hz
17	Operating Temperature	Support Operating temperature : 0°C~40°C
18	Storage Temperature	Support Storage temperature : -10°C~70°C
19	Humidity	Support Relative humidity 20%~85% (non-condensing)

<u>Minimum required specifications for 5 KVA Online UPS</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl.No.	Description	Tender Specification	Compliance (Yes/No)
1	Capacity	6K VA / 4800 W	
2	Nominal Input Voltage	208/220/230/240V	
3	Nominal Input Frequency	50Hz with range of 46 - 54Hz	
4	Input Power Factor	≥ 0.99 at 100% Load	
5	Type of Rectifier	IGBT based	
6	Nominal voltage regulation	1%	
7	Inbuilt OVCD	Yes	
8	Charging Method	Constant voltage constant current (CVCC)	
9	Charging current Capacity	26A max	

10	Number of Batteries	16-20 Blocks for Long run models.	
11	Type of Batteries	Depending on applications	
12	Back up	Max 10 hrs on full load with inbuilt charger.	
13	Load power factor	0.8	
14	Nominal Output voltage	208/220/230/240VAC	
15	Output Frequency	Frequency Range (Batt. Mode): 50 Hz ± 0.1 Hz; Frequency Range (Synchronized Range): 46Hz ~ 54 Hz @ 50Hz system	
16	Output Waveform	Pure sine wave	
17	Total Harmonic distortion (THD)	<=3% for Linear load & <=7% for Non linear load	
18	Inverter	IGBT based PWM with Instantaneous Sine wave control	
19	Power Rating	6KVA / 4.8KW	
20	Dynamic response	IEC62040-3 Classification 1	
21	Crest factor	3:1	
22	Duty.	Continuous duty	
23	Overload Capacity	AC mode:100%~110%: 10min、 110%~130%: 1min、>130%: 1sec; Battery mode: 100%~110%: 30sec、110%~130%: 10sec、>130%: 1sec	
24	Frequency synchronization Band for Static. Bypass	46 - 54Hz	
25	Transfer (Inverter to Bypass)	0 ms	
26	Retransfer ( Bypass to Inve <u>rt</u> er)	0 ms	
27	Manual bypass facility	No	
28	Change over from static bypass to manual bypass	No	
29	Automatic Bypass	Inbuilt	
30	Inverter Efficiency (DC to AC)	AC mode : > 93%;	
31	Overall efficiency (AC to AC)	Upto 91%	
32	Acoustic Noise Level	Less than 58dB @ 1 Meter	
33	Ambient Temperature	0 - 40 Deg C	
34	Storage Temperature	-15°C~60°C	
35	Humidity	<95 % and non-condensing	
36	Altitude	<1000m	
37	Enclosure Protection Grade	IP 20	
38	Cooling	Forced Air	
39	Dimension (in mm) & Weight (in Kg)	H = 318mm,W = 190mm, D = 369mm & Weight of 21Kg for long run model.	
40	Metering (Digital display) Input voltage Battery voltage Output voltage Output current Output frequency Input Frequency Heat sink temperature	Indications are in the form of LED's- Battery LED, Inverter LED, Bypass LED, Line LED, Fault LED; ALSO 5 LED;s are for indicating the LOAD % during Mains mode, and Battery charge status during Battery Mode.	

	Fault indicated on Digital Display Alarms	LED indication display
41	input fail	
	Battery Low	Inhvilt and accessible on LCD Display
	Transfer to bypass and system fault	Inbuilt and accessible on LCD Display.
42	LED Indications	
		Overload/Short Ckt/Battery Deep
43	Protection	Discharge/Low Battery/Reverse
		Battery/Inverter Current Limitation/Over
		Temprature/Output Overvoltage.  RS 232 communication port for interfacing,
44	Optional features	Remote monitoring
45	Testing standards	Safety: IEC/EN 62040-1-1
46	Surge Protection standard	SURGE : IEC/EN 61000-4-5
47	Noise standard	<b>EMI</b> : Conducted Emission (Category C3) IEC/EN 62040-2, Radiated Emission IEC/EN 62040-2
		EMS :(Level 4)
		ESD - IEC/EN 61000-4-2
	Other Standards	RS - IEC/EN 61000-4-3
48		EFT - IEC/EN 61000-4-4
10		CS - IEC/EN 61000-4-6
		Power-frequency Magnetic field - IEC/EN 61000-4-8
		Low Frequency Signals - IEC/EN 61000-2-2
49	BIS	IS standard
50	Quality standard	IS 9001-2015
51	Environment standard	ISO 14001
52	OSHAS	ISO 45001
53	IT security management	ISO 27001
54	NABL Approved test report	Yes
55	Top 5 company in terms of revenue	Yes,Frost and Sullivan report

# $\frac{Minimum\ required\ specifications\ for\ 4TB\ 24X7\ Surveillance\ Specialized\ Storage}{(Technical\ Specs./datasheet/leaflet\ shall\ be\ submitted\ with\ technical\ bid)}$

Sl. No.	Specification	Description	Compliance (Yes/No)
	•	•	(168/110)
1	Interface	SATA 6 Gb/s	
2	Drive Bays	Upto 8 Drive Bays Supported	
3	Cameras	Upto 32 Cameras Supported	
4	Max. Sustained Transfer Rate		
	OD (MB/s)	130MB/s	
5	Cache (MB)	128 MB	
6	Load/Unload Cycles	3,00,000	
7	Workload Rate Limit (WRL)	100TB/Year	
8	Warranty	3 Years	
9	Average Operating Power (W)	7 W	
10	Idling Average (W)	4 W	

	11	Capacity	4 TB	
Ī	12	Operating Temperature	0 to 70 °C	

# Minimum required specifications for LED Commercial Display (16 x 7 operation)

(Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Section	Item Description	Detailed Specification	Compliance (Yes/No)
		Screen Size	43" or Higher HD Display	
		Panel Type	IPS	
		Viewing Angle (H x V)	178 x 178 degree	
1	Panel	Aspect Ration	16:09	
1	Faller	Brightness	300 or Higher	
		Contrast Ration	1100: 1 or Higher	
		Signage Application	Yes	
		Response Time	8ms or better	
2	2 Ports		HDMI 2 or more, USB (USB 3.0),	
			RS232, AV In/Out, LAN	
3	Operation Temperature		0 degree Centigrade to 40 degree Centigrade	
4	Operation Humidity		10% to 80%	
5	Power Supply		100-240V`, 50/60Hz	
6	Consumption		99 or Less W (typ)	
7	Safety		UL, CB, FCC	

# **Minimum required specifications for UTP CAT6 cables**

(Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Parameter	Required Specifications	Compliance (Yes/No)
1	Type of Cable	Unshielded Twisted Pair (UTP) CAT 6 cable Pair-shielded 100 Ohm installation cable with overall braided screen, suitable for transmission frequencies of up to 600 MHz	
2	Conductor	4 pair UTP armoured cable 23 AWG Solid bare Copper	
3	Primary insulation	Polyethylene	
4	Outer Sheath	FR-PVC	
5	Shielding	Screened to ensure protection against EMI and for cross talk compliance.	
6	Application standard	ANSI/TIA-568-C.2 category 6 ISO 11801 Class E	
7	Application	Indoor/outdoor installation	
8	Standard	UL Listed	

<u>Minimum required specifications for Media Converter</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Specification	Description	Compliance (Yes/No)
1	Fiber Type	Single Mode	
2	Wavelength	1310nm	
3	Fiber Size	9/125 Micron	
4	Fiber Connector Type	SC Type	
5	Copper Connector Type	UTP RJ-45	
6	LED Indicator	1000M, Link/Act., TP:100, FDX & PWR	
7	Power	5V DC, 1A	
8	Operating Temperature	0°C~50°C	
9	Humidity	5%~90% Non-condensing	

# Minimum required specifications for Floor Standing Rack

(Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No.	Description	Compliance (Yes/No)
1	Racks should be manufactured out of high grade CRCA equivalent to TATA Steelium. Design should be in CKD, with 60-80micron power coating.	
2	Rack should be from ISO 9001, 14001, 18001 and IATF Certified Company. Certificates should be furnished with the Bid	
3	Standard for Racks configuration will be completely knocked down frame with openable side panel and vented top cover	
4	Rack should have Front Perforated door and perforated door at Rear.	
5	Rack should have provision to mount racks on Floor & it should be with castor & levelers.	
6	Rack should be 18U (1U = 44.45 mm) in Height.	
7	It should be 600MM Wide & 800MM Deep.	
8	Rack should Conforms to DIN 41494 or Equivalent EIA /ISO / EN/CEA Standard	
9	Rack should have Adjustable mounting depth.	
10	Rack should have Numbered U positions	
11	Rack should have 100% assured compatibility with all equipment conforming to DIN 41494 (General industrial standard for equipment)	
12	Powder coated finish with seven Tanks pre-treatment process meeting IS Standards. Salt Spray Test Certificate should be submitted. It should be ROHS Complied.	
13	Rack should have minimum 1 No. Hoz. Cable Manager.	
14	Rack should have Fan Module Mount Provision on top Cover with 2 Fan Housing unit of 180 CFM with single power cord.	
15	It Should have minimum 1 Nos. 1Ph, 230V, 32A, 2 U standard Horz. rack mount power distribution unit with 6 X Indian Round Pin 5/15A PDU	
16	Rack should have provision for cable entry Exit from Both top & Bottom.	
17	Rack should have 2 Packet of mounting hardware, Pack of 20.	
18	Rack should have an 19" mount Earth Bar with earth continuity kit	

<u>Minimum required specifications for Wall Mount Rack</u> (Technical Specs./datasheet/leaflet shall be submitted with technical bid)

Sl. No	Description	
1	Racks manufactured out of steel sheet punched, formed and Powder coated	
2	Rack should be from ISO 9001, 14001, 18001 and IATF Certified Company. Certificates should be furnished with the Bid	
3	Rack should have Front Toughened Glass Door with lock & Key	
4	Rack should be 6U(1U=44.45 mm) in Height, minimum 600MM Width, 500MM Depth	
5	Rack should have Numbered U positions,	
6	Rack should have 100% assured compatibility with all equipments conforming to DIN 41494 (General industrial standard for equipments)	
7	Rack should have Fan module Mount Provision on top Cover with fan includng fingur guard.	
8	Rack Shuuld have 1Ph, 230V, 8A, 2U standard rack mount power distribution unit with 6 X Indian Round Pin 5A, Inlet Plug type 6A Indian Round Pin, 8A Fuse - PDU Rating 1.8KVA	
9	Rack should have provision for cable entry Exit from Both top & Bottom.	
10	Rack should have 1 Packet of Mounting hardware, Pack of 10	

# Cable laying

Cable laying shall conform to BIS norms. In case of cables above ground PVC capping- casing to be used, as per BIS standards.

Financial Bid (On the letter head of the Firm/Agency)

Sl. No.	ITEMS	Qty.	Unit	Make	Unit Price (Rs.)	Total Without	Tax %	Tax Amount	Total with Tax (Rs.)
1	5 Mega Pixels IP Dome Camera	13	Nos.			Tax		(Rs)	
2	5 Mega Pixels IP Bullet Camera	3	Nos.						
3	32 Channel Network Video Recorder (NVR)	1	Nos.						
4	24 Port Gigabit PoE+ switch with 4 SFP uplink	1	Nos.						
5	8 Port Gigabit PoE+ switch with 2 SFP uplink	6	Nos.						
6	4TB SATA 24X7 Surveillance Specialized HDD	4	Nos.						
7	1000BaseT to 1000BaseLx (10Km) Single mode Media converter	4	Nos.						
8	6 KVA Online UPS with 60Min Backup	1	Nos.						
9	43" or more LED Commercial Display (16 x 7 operation)	3	Nos.						
10	4 pair CAT6 UTP cable 305M	2	Box						
11	RJ 45 Connectors for CAT6 termination (100)	1	Box						
12	17U Floor standing Rack with all accessories for NVR, switches and passive components	1	Nos.						
13	6U wall mount rack with all accessories for switches and passive components	2	Nos.						
14	3 core 2.5mm branded electrical cable	180	Mtrs.						
15	5AMP switch & 3 pin socket	9	Nos.						
16	Installation & Configuration C UTP, Electrical Cables through of Camera, Racks, UPS, Confi	h Con	duit, F						
Grand	l Total								

Signature:
Name:
Designation:

# **ANNEXURE-II**

# **VENDOR PROFILE**

1	Name of the Firm/Company	
2	Type of the Organisation (whether Sole Proprietorship, Partnership, Private Limited or Cooperative body, etc.)	
3	Name of the Proprietor/Partner/Directors of the Organisation/Firm:	
4	Registration details	
5	GST Registration No.	
6	PAN details	
7	Year Established	
8	Address of office through which the proposed work of the APSC will be handled and the name and designation of the Officer-in-charge	
9	Contact Number	
10	e-mail ID	
11	Website	
12	No. of full time Tech. personnel currently on roll	
13	No. of years of Proven experience of providing similar Services	
14	Various Certifications (ISO Certification/Six Sigma/ Nasscom/DOT Registered)	

Date:

Place

Signature:

Name:

Designation:

*Note:* Audited Balance Sheet and Profit and Loss Account for past three years should be attached separately.

# ANNEXURE-III

# **DECLARATION**

I/We having our office as mentioned below and declare that I/we have never been blacklisted by any State Government/Central
Government or any State/Central PSU.
Signature: Name: Designation: Name of the Agency: Address of the bidder:
Thank of the rigenty, ritual to of the order.
Date: Place:

# **ANNEXURE-IV**

# **TURN OVER DETAILS**

As per the tender eligibility criteria, the sales turn-over should not be less than Rs. 25 Lakhs per annum in the past three years. These turnover details will have to be substantiated with the appropriate documentary evidences duly enclosed.

The last three years sales turn-over details are furnished as follows. Name of the Company / Firm:

S.L. No.	Financial Year	Turnover (Rs. In Lakhs)
1	2019-2020	
2	2020-2021	
3	2021-2022	

Proof of the above sales turn-over details should be furnished in the form of Audited Annual Accounts of the bidder.

# ANNEXURE-V

# WORK EXPERIENCES

List of important Projects executed by the company/firm (only those projects that meets the requirements of Pre-Qualification criteria mentioned)

Sr. No.	Name & Location of work	Cost of work	Name of owner or organization	Full address	Name of the contact person from owner's side for whom work was executed	Contact no. of the contact person
1						
2						
3						
4						
5						

⊢										
4	5									
Si	Signature of Bidder									
N	ame:	-								