



# INDIAN AUDIT & ACCOUNTS DEPARTMENT

Office of The Director General of Audit (Central),  
Kolkata



**8, Kiran Shankar Roy Road, Kolkata-700 001**

## PREVIEW OF TENDER

**TENDER REFERENCE NO:**Record-I/C/Purchase/CCTV System/2020-21 dated **28.12.2020**

**DATE OF ISSUE OF TENDER DOCUMENT:** **28.12.2020**

**LAST DATE FOR RECEIPT OF TENDER DOCUMENT:** **04.01.2021** at 1.00 pm

**TIME AND DATE OF OPENING OF THE TENDERS:** **04.01.2021** at 2:00 pm

**PLACE OF OPENING OF THE TENDERS:**O/o the D.G.A(C),Kolkata,8,Kiran Sankar Roy Road, G.I.Press Bldg. (East wing),Kolkata:700-001

## NOTICE INVITING TENDER

Office of the Director General of Audit (Central), Kolkata invites sealed quotations for supply/installation of following items as per the specification given below:-

Sl. No.	ITEM	Make	UNIT	Specification
1	1/4 "Cmos, 4 MP IP Based IR Dome Camera with, upto 20 Mtr distance compatible with, PoE & 12V DC	Any reputed company	25	Annexure-II
2	32 Channel <b>IP</b> Network Video Recorder ( <b>NVR</b> ) with 1080p Real-time Preview (HDMI/VGA) & H.264 dual-stream Video Compression with support Surveillance with 4 SATA HDD slot USB 2.0 HDMI VGA having connectivity.		1	Annexure-II
3	6 TB Surveillance HDD for Record. (approx 30 days)		2	Compatible with the system
4	Armoured with Stainless steel Sheathing CAT6 Video cable with connectivity to quoted NVR		1220 Mtrs (approx)	Annexure-II
5	PoE + Surveillance Switch, 24-port switch for efficient network management		2	Annexure-II
6	WP PVC Joint Box with Lock & Key		25	Compatible with the system
7	32" Commercial Display for Live Display.		1	Compatible with the system
8	Networking Cabinet 4U with accessories		1	Annexure-II
9	RJ45 Connectors & Male-Female Power Jack.		60	
10	ISI Marked PVC Pipe, Flexible Pipe, Saddle, etc. (The pipe quantity mentioned is an estimate value		1000 Mtrs. (approx)	Compatible with the system

The aforesaid items will have to be supplied/installed in the premises of Office of the Director General of Audit, Central, Govt. of India Press Building, 8, Kiran Shankar Ray Road,Kolkata-700001 as per detailed terms and conditions(**Annexure-I**) and specifications in **Annexure-II**.

Bidders should furnish the duly filled tender certificate (**Annexure-III**), failing which tender will be cancelled.

Sealed quotations, super scribed as “ **Procurement, Installation, Testing and Commissioning of CCTV cameras and surveillance systems**”, are invited and addressed to the **Dy. Director (Administration), Office of the Director General of Audit(Central), Kolkata-700001**, which must reach latest by **1.00 pm** on **04.01.2021** by hand/by post in the tender box located on **1<sup>st</sup> floor** to this office. The Bids shall be opened by the purchase committee in chamber of **Dy. Director (Administration), O/o the Director General of Audit, Central, Govt. Of India Press Building, 8, Kiran Shankar Ray Road, Kolkata-700001** on **04.01.2021** at **2:00 pm** and in the presence of such bidders who may wish to be present, maintaining the protocol of COVID 19. The Competent Authority reserves the rights to reject any or all the quotations without assigning any reason.

  
Senior Audit Officer/Record

## ANNEXURE-I

### **TERMS & CONDITIONS:-**

1. The Bidder should be registered with the Income Tax, Goods & Service Tax Department. Supporting documents viz. Copies of Income tax Registration (PAN) and Goods & Service Tax registration shall be required to be submitted with the bid.
2. Bidders should be Authorized Dealer/Distributor of a reputed brand, who may fulfill other terms & conditions mentioned below and conforming the specifications as stated in the Annexure-II.
3. Tenderer should quote rate on **10** items separately in the same quotation. Bid price should be **inclusive of all taxes, levies, delivery charges etc.** No subsequent upward revision in rate(s) shall be accepted by this office. The bid price of each item should commensurate with the prevailing market rate for such items. Bidders are requested to visit the office to see the installation places on ground floor, 1<sup>st</sup> floor and 2<sup>nd</sup> floor of this office and quote the rate required for the items stated in Annexure-II.
4. Brochure of all the products quoted with technical specifications is mandatory.
5. Bidder/OEM (Original Equipment Manufacturer) should submit technical specification of their own products.
6. Bidders are requested to provide valid email IDs, contact numbers and other information. The same should be clearly written/ typed without any error. Failure of any communication due to invalid email ID/ phone will not be the responsibility of this office.

Each paper of bidding document should be signed and stamped by the bidder or by his/her authorised signatory. The envelope containing the tenders (quotations) should be sealed and super scribed as “**Procurement, Installation, Testing and Commissioning of CCTV cameras and surveillance systems**”.

7. Bidders shall not be permitted to withdraw their offer or modify the terms & conditions after submission of bidding document.
8. L1 bidder must show the sample item/machine conforming the specification specified in **Annexure-II** as and when it will be declared by the office.
9. The period of validity of the quoted rate should be for a minimum period of **60 days** from the date of closing of quotation.
10. The competent authority of O/o the Director General of Audit, Central, Kolkata reserve all rights to reject any bids including of those bidders who fail to comply with instruction without assigning any reason whatsoever and does not bind itself to accept the LOWEST or any specific bids.
11. **Location of Supply:** All the items will have to be supplied/installed in the ground floor, 1<sup>st</sup> floor, 2<sup>nd</sup> floor in the premises of the Office of the Director General of Audit, Central, Kolkata, Govt. of India Press Building, 8, Kiran Shankar Ray Road, Kolkata-700001 as per the terms and conditions given herein.
- 13 **Terms of Payment:** 100% after delivery and verification of items at specified location thereon. In this regard an E-payment mandate form will be issued by this office. All disputes and differences arising out or in connection with this tender/contract shall be subject to the exclusive jurisdiction of courts at Kolkata. TDS may be deducted as per extant rules/act.

  
Senior Audit Officer/Record

## Annexure-II

### A. 1/4 "Cmos, 4 MP IP Based IR Dome Camera with, upto 20 Mtr distance compatible with PoE & 12V DC:

<b>Camera</b>		Data streaming	Event data
Image sensor	Fixed focus, fixed iris 1/3" progressive scan RGB CMOS	Built-in installation aids	Pixel counter
Lens	2.8 mm, F2.0	<b>General</b>	
Minimum illumination	Horizontal field of view: 106° Vertical field of view: 59° 0.25 lux at 50 IRE F2.0	Casing	Aluminum and plastic casing Color: White NCS S 1002-B For repainting instructions of cover ring, see <a href="http://axis.com">axis.com</a>
Shutter speed	1/32500 s to 1/5 s	Sustainability	PVC free  70% recycled plastics
Camera angle adjustment	Pan: ±105° Tilt: ±85° Rotate: ±175°	Mounting	Recessed in ceiling or wall.  Camera module compatible with recessed back box of AXIS M3011 and AXIS M3014 Network Cameras.
<b>Video</b>		Memory	512 MB RAM, 512 MB Flash
Video compression	(MPEG-4 Part 10/AVC) Main and High Profiles (MPEG-H Part 2/HEVC) Main Profile Motion JPEG	Power	Power over Ethernet (PoE) IEEE 802.3af/802.3at Type 1 Class 1 Typical 2.8 W, max 3.7 W
Resolution	1920x1080 (1080p) to 320x240	Connectors	Shielded RJ45 10BASE-T/100BASE-TX PoE
Frame rate	25/30 fps with power line frequency 50/60 Hz	Storage	Support for microSD/microSDHC/microSDXC card Support for SD card encryption Support for recording to network-attached storage (NAS) For SD card and NAS recommendations see <a href="http://axis.com">axis.com</a>
Video streaming	Multiple, individually configurable streams in H.264, H.265 and Motion JPEG Axis Zipstream technology in H.264 and H.265 Controllable frame rate and bandwidth VBR/MBR H.264/H.265	Operating conditions	0 °C to 45 °C (32 °F to 113 °F) Humidity 15% to 85% RH (non-condensing)
Multi-view streaming	2 individually cropped out view areas in full frame rate	Storage conditions	-40 °C to 65 °C (-40 °F to 149 °F) Humidity 5% to 95% RH (non-condensing)
Image settings	Compression, color, brightness, sharpness, contrast, local contrast, white balance, exposure control, text and image overlay, mirroring of images, privacy masks WDR: up to 105 dB depending on scene Rotation: 0°, 90°, 180°, 270° including Corridor Format	Approvals	EMC EN 55032 Class B, EN 55024, EN 61000-6-1, EN 61000-6-2, FCC Part 15 Subpart B Class A and B, ICES-003 Class B, VCCI Class B, RCM AS/NZS CISPR 32 Class B, KCC KN32 Class B, KN35
Pan/Tilt/Zoom	Digital PTZ	Safety	IEC/EN/UL 62368-1, IS 13252
<b>Network</b>		Environment	IEC 60068-2-6, IEC 60068-2-27, IEC 60068-2-2, IEC 60068-2-14
Security	Password protection, IP address filtering, HTTPS <sup>a</sup> encryption, IEEE 802.1x (EAP-TLS) <sup>a</sup> network access control, digest authentication, user access log, centralized certificate management, brute force delay protection, signed firmware	Network	NIST SP500-267
		Dimensions	Visible height outside ceiling/wall: 36 mm (1.7/16)

protocols

Layer 3 protocols, FTP, SFTP, CIFS/SMB, SMTP, Bonjour, UPnP™, SNMP v1/v2c/v3 (MIB-II), DNS, DynDNS, NTP, RTSP, RTP, TCP, UDP, IGMPv1/v2/v3, RTCP, ICMP, DHCP, ARP, SOCKS, SSH, LLDP, MQTT

91 mm (3 9/16 in) Diameter cut-out in ceiling/wall: 72 mm (2 13/16 in) Height inside ceiling/wall: 79 mm (3 1/8 in)

Weight 350 g (0.8 lb)

System integration

Application Programming Interface

Open API for software integration, including VAPIX® and AXIS Camera Application Platform; specifications at *axis.com* AXIS Video Hosting System (AVHS) with One-Click Connection ONVIF® Profile G, ONVIF® Profile S, and ONVIF® Profile T, specification at *onvif.org*

Include Installation guide, Windows® decoder 1-user license

accessories

Optional accessories Black cover ring View protector Smoked dome AXIS Surveillance microSDXC™ Card

For more accessories, see *axis.com*

Analytics

Included Video Motion Detection, active tampering alarm Digital Autotracking, Fence Guard, Motion Guard, Occupancy Estimator, Direction Detector, Tailgating Detector, Random Selector Support for Camera Application Platform enabling installation of third-party applications,

Video management software

Companion, Camera Station, video management software from Application Development Partners available

Event triggers Analytics, virtual inputs through API, edge storage events

Event actions Record video: SD card and network share

Upload of images or video clips: FTP, SFTP, HTTP, HTTPS, network share, and email Pre- and post-alarm video or image buffering for recording or upload Notification: email, HTTP, HTTPS, TCP, and SNMP trap Overlay text

Warranty 5-year warranty,

**B. 32 Channel IP Network Video Recorder (NVR) with 1080p Real-time Preview (HDMI/VGA) & H.264 dual-stream Video Compression with support Surveillance with 4 SATA HDD slot USB 2.0**

**HDMI VGA:**

**Processor:** Intel® Core™ i3

**Memory:** 8 GB

**Storage:** Hot swappable Enterprise Class HDD

Total HDD slot: 4

Out-of-the-box storage: 12 TB after RAID 5

Out-of-the-box capacity without RAID: 16 TB (4x4 TB)

**RAID** Factory RAID level: 5

RAID levels: 0, 1, 5, 6, 10

**Power** Up to 2 x 350 W hot-plug redundant power supplies(100 - 240 V AC, 50/60 Hz, 4.8 - 2.4 A)

**Connectors**

**Front side:**1x USB 2.0

**Rear side:**2x USB 2.0

2x Ethernet (RJ45) 1 GbE

1x VGA

1x Serial port

Video

**Recording** Qualified for recording up to 48 video channels with a total recording rate up to 384 Mbit per second.

**General:**

**Operating system** Microsoft® Windows® 10 IoT Enterprise SAC

Built-in operating system recovery: yes

Operating system drive: 240 GB SSD

**Operating conditions:**

10 °C to 35 °C (50 °F to 95 °F)

Humidity 20–80% RH (non-condensing)

**Storage conditions:** -40 °C to 65 °C (-40 °F to 149 °F)

**Approvals EMC:**

EN 55032 Class A, EN 55024, EN 61000-3-2, EN 61000-3-3,

FCC Part 15 Subpart B Class A, ICES-3(A)/NMB-3(A),

RCM AS/NZS CISPR 32 Class A, VCCI Class A, KC KN 32 Class A,

KC KN 35

**Safety:**

IEC/EN/UL 60950-1, NOM, BSMI, EAC

**Dimensions** 596 x 484 x 43 mm (23.47 x 19.06 x 1.7 in)approx, 1U chassis

**Weight** 13.5 kg (approx)

**Included accessories:**

Rack rails and power cords

**Warranty** 5-year warranty

**C. Armoured with Stainless steel Sheathing CAT6 Video cable with connectivity to quoted NVR:**

Outer Jacket Ripcord	Yes
<b>OVERALL NOMINAL DIAMETER:</b>	
Overall Nominal Diameter	6.1mm
<b>MECHANICAL CHARACTERISTICS:</b>	
Operating Temperature Range	-20 <sup>o</sup> To + 75 <sup>o</sup>
Bulk Cable Weight	65kg/km
Max. Recommended Pulling Tension	180 N
Min. Bend Radius (Install)	13.0mm
<b>APPLICABLE SPECIFICATION AGENCY COMPLIANCE:</b>	
<b>APPLICABLE STANDARDS:</b>	
NEC/(UL) Specification	CM
NEC Articles	800
CEC/C(UL) Specification	CM
IEC Specification	11801 Category 6
EU RoHS Compliant (Y/N)	Y
TIASpecification	568-C.2 Category 6
Other Specification	NEMA WC-63.1 Category 6, UL verified to Category 6
<b>FLAME TEST:</b>	
UL FlameTest	UL1685 UL Loading
<b>SUITABILITY:</b>	
Suitability –Indoor (Y/N)	Y
<b>ELECTRICAL CHARACTERISTICS:</b>	
Nom. Mutual Capacitance @ 1 KHz	5.6 nF/100m
MaximumCapacitance Unbalance	330 pF/100m
Nominal Velocity of Propagation	70 %
Maximum Delay @ 100 MHz	538 ns/100m
Maximum Delay Skew	45 ns/100m
Maximum Conductor DC Resistance @ 20 Deg.C	9.38 Ohms/100m
NominalConductor DC Resistance @ 20 Deg.C	6.9Ohms/100m
Maximum DCR Unbalance @ 20 Deg.C	5 %
Characteristic Impedance	100 ± 15 Ohms
Maximum Intended Operating Voltage	80 V RMS

**D. PoE + Surveillance Switch, 24-port switch for efficient network management:**

**Network function:** DHCP server included VLAN

**Security:** Password protection, IP address filtering, HTTPS encryption, IEEE 802.1X network access control, ACL, Private VLANs, DHCP Snooping

**Supported protocols:**

IPv4, IPv6, HTTP, HTTPS, QoS, Bonjour, UPnP, SNMP v1/v2c/v3, DNS, NTP, TCP, UDP, IGMP, ICMP, DHCP, ARP, SSH, STP, RSTP, MSTP, LLDP, LLDP-MED, TFTP, SMTP, BPDU

**Throughput:** 38.7 Mpps

**Switching capacity:** 52 Gbps

**Jumbo frames:** 9216 Bytes

**General**

**Casing:** Metal

**Color:** Black

**Dimensions WxDxH:** 442 x 211 x 44 mm (17.4 x 8.31 x 1.73 in)

**Weight:** 3.2 kg (approx)

**Power requirements:** 100–240 V AC, 50/60 Hz

**PoE class:** Power over Ethernet Plus (PoE+) IEEE 802.3at Type 2 Class 4

**PoE output:** Port 1 to 24: Up to 30 W

Power budget: 370 W

**Connectors PoE ports:** RJ45 10Base-T/100Base-TX/1000Base-T (24x)

**Uplink Combination port:** RJ45/SFP 100Base-TX/1000Base-T (2x)

**Power**

Power connector port: **Surge protection** 6kV on all network ports and AC lines

**Operating conditions:** 0 °C to 50 °C

Humidity 10–90% RH (non-condensing)

**Approvals EMC**

EN 55032 Class A

EN 55024

FCC part 15 Subpart B Class A

VCCI Class A

RCM AS/NZS CISPR 32 Class A

ICES-003 Class A

**Safety**

IEC/EN/UL 60950-1

EN 62368-1

EAC

CE, ITE, JATE, BSMI

**Warranty** 5-year warranty



**E. Networking Cabinet 4U with accessories:**

Usability- Network Switches/Routers/Firewall/ DVR/NVR/Audio- Visual Equipment/Low Depth Servers

- Front Door- Glass Door With Key Lock
- Side Panels- Fixed Welded/bolted with Top/Base Frame
- Cable Entry Cut- Top/ Bottom
- 2 Pair Heavy Duty (1.5mm) Vertical Mounting Rail
- Cooling Option- 2 fan Provision mounted on Top Panel
- Load Bearing Capacity up to 25 -30 KG
- Construction- Dismantle/Welded Construction Overall 1.0mm Thick (20 gauge), Load Bearing angles are 1.6 MM
- Power Distribution Unit- 6 Socket 5 & 15 AMP Horizontal
- Cable Management- Horizontal Metal & PVC
- Fix Shelf/Cantilever Shelf- 255mm to 600mm
- Color- light Grey Powder Coated ( RAL 7035) and RAL 9005 Black ( as per Requirement)

**F. Others:**

- (i) Set up of wired/ wireless network: All sorts of wired and wireless network in respect of installation/commissioning of items/goods (stated above) must be provided to this office.
- (ii) Cabling & networking: An organized cabling with conduit facility to be provided for the CCTV system as desired by this office.
- (iii) Onsite warranty of all the items minimum one year/as stated in Annexure-II should be provided.



**Senior Audit Officer/Record**

**Annexure-III**  
**Tender Certificate**

To  
The Dy. Director (Admn.)  
O/o the D.G.A (C), Kolkata  
Govt. Of India Press Building (East Wing),  
8, Kiran Sankar Roy Road  
Kolkata-700001

Madam,

With reference to your tender Notice No.

\_\_\_\_\_ dated \_\_\_\_\_ I am to  
submit my tender for **Procurement, Installation, Testing and Commissioning of CCTV cameras  
and surveillance systems** as specified in the Notice Inviting Tender.

I further affirm that I have read and fully understood the tender notice and agree to abide by all the terms and conditions and laid therein, which are being signed in token of my acceptance. In case, I fail to abide by the terms and conditions (Annexure-I) or failed to fulfill any technical specifications (Annexure-II ) to carry on the contract satisfactorily, I will be liable to be terminated from contract/supply

Enclosure:

1. Statement of quoted value of contract.
2. Terms and conditions duly signed.
3. Copy of Trade License.
4. Copy of PAN Card
5. Copy of GST Registration certificate.

Dated:

Signature \_\_\_\_\_

Name of Tenderer \_\_\_\_\_

M/s \_\_\_\_\_