

CORRIGENDUM

The bidders are requested to consult before offering rates / bidding in connection with e-NIT No: **WBZA-24/CCTV / GZP of 2023-24**

The detailed technical specification and description of cameras, cables, switches and other detailed peripheries and accessories etc. are enclosed in separate sheets which are to be matched with the bidder submitted specification otherwise would be disqualified.

2 Mega pixel Fixed Lens Bullet Camera with Built-in-Mic

Sl.No.	TechnicalSpecification:	Compliance(Yes/No)	Deviations(if any)
1	ImageSensor	1/2.7"ProgressiveScanCMOS	
2	Min.illumination	Color:0.005Lux(AGCon),0LuxwithIR	
3	ImageResolution	2MP	
4	Day&Night	IRCutFilter	
5	DigitalNoiseReduction	3DDNR	
6	WDR	120 dB	
7	Built-inMicrophone	Yes	
8	On-BoardStorage	Built-inmemorycardslot,supportmicroSDcard,upto256GB	
9	Lens	FixedLens:4mm/6mm(aspersiterequirement)	
10	IRrange	min.40mIR	
11	StreamingType	ShouldSupportThreestream	
12	VideoCompression	H.265,H.264	
13	ImageEnhancement	BLC,HLC,3DDNR,Auto-WhiteBalance,PrivacyMask	
14	EthernetPort	1xRJ4510M/100MEthernetport	
15	NetworkProtocol	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP,NTP,UPnP™,SMTP,IGMP,802.1X,QoS,IPv6,Bonjour,IPv4,UDP,SSL/TLS	
16	Preferableanalytics	Motiondetection,Linecrossing,intrusiondetection,Videotamperingdetection	
17	PowerSupply	DC12V,PoE	
18	OperatingConditions	-30°C~+60°C	
19	IngressProtection	IP67	

2 Mega pixel Fixed Lens Dome Camera with Built-in-Mic

Sl. No.	TechnicalSpecification:	Compliance(Yes/No)	Deviations(if any)
1	ImageSensor	1/2.7"ProgressiveScanCMOS	
2	Min.illumination	Color:0.005Lux (AGCon),0LuxwithIR	
3	ImageResolution	2MP	
4	Day& Night	IRCutFilter	
5	DigitalNoiseReduction	3DDNR	
6	WDR	120dB	
7	Built-inMicrophone	Yes	
8	On-BoardStorage	Built-inmemorycardslot,supportmicroSD card,upto256GB	
9	Lens	Fixed Lens:2.8mm /4mm	
10	IRrange	min.40mIR	
11	StreamingType	ShouldSupportThreestream	
12	Video Compression	H.265,H.264	
13	Image Enhancement	BLC,3D DNR,Auto-WhiteBalance,PrivacyMask	
14	EthernetPort	1x RJ4510M/100MEthernetport	
15	NetworkProtocol	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP, RTCP,NTP,UPnP™,SMTP,IGMP,802.1X,QoS, IPv6,Bonjour, IPv4, UDP,SSL/TLS	
16	Preferableanalytics	Motiondetection,Linecrossing,intrusiondetection,Videotamperingdetection	
17	PowerSupply	DC12V, PoE	
18	OperatingConditions	-30°C ~+60°C	
19	IngressProtection	IP67	

5 MP IP Bullet Camera Outdoor Extra Dark Audio (Night Vision) H.265+

Sl.No.	Technical Specification:		Compliance(Yes/No)	Deviations(if any)
1	ImageSensor	1/2.7"ProgressiveScanCMOS		
2	Min.illumination	Color:0.003Lux(AGCO),0LuxwithIR		
3	PreferredrecordingResolution	2592x1944		
4	Day&Night	IRCutFilter		
5	Shutterspeed	1/3sto1/100,000s		
6	DigitalNoiseReduction	3DDNR		
7	WDR	120dBTrueWDR		
8	Lens	2.8,4,and6mmoptional		
9	IRrange	min.60mIRorhigher		
10	StreamingType	ShouldsupportFourstreams 50Hz:25fps(2592x1944,2688x1520,1920x1080,1280x720) 60Hz:24fps(2592x1944) 30fps(2688x1520,1920x1080,1280x720)		
		50Hz:25fps(640x480,640x360) 60Hz:30fps(640x480,640x360)		
11	VideoCompression	H.265,H.264,H.264+,H.265+		
12	BitRateControl	CBR/VBR		
13	ScalableVideoCoding(SVC)	H.264andH.265encoding		
14	AudioCompression	G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC		
15	ImageEnhancement	BLC,HLC,3DDNR,120dBWDR,ROI(5fixedregionsformainstreamandsub-stream),Auto-WhiteBalance		
16	Imagesettings	Rotatemode,saturation,brightness,contrast,sharpnessadjustablebyclientsoftwareor web browser		
17	Day/NightSwitch	Day,Night,Auto,Schedule		
18	NetworkProtocol	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,NTP,UPnP,SMTP,IGMP,802.1X,QoS,IPv4,IPv6,UDP,Bonjour,SSL/TLS,PPPoE,ARP,SNMP		
19	API	OpenNetworkVideoInterface(PROFILES,PROFILEG,PROFILET),SDK		
20	SimultaneousLiveView	6channel		
21	UserHost	32users.3userlevels: administrator, operatorand user		
22	EdgebaseRecording&Networkstorage	Built-inMicroSD/SDHC/SDXCslot,(256GBorbetter),NAS(NFS,SMB/CIFS),autonetwerk replenishment(ANR)		
23	Preferableanalytics	Line crossing detection, intrusion detection, Motion detection (human and vehicle targets classification),Unattended baggage detection, video tampering, Objectremovaldetection,Scenechangedetection,audioexceptiondetection,Facecapture		
24	EthernetPort	1xRJ4510M/100MEthernetport		
25	Audiointerface	1-in/1-out		
26	AlarmI/O	2-in/2-out		
27	Built-inMicrophone	Yes		
28	Built-inSpeaker	Yes		
29	strobelight,audiblewarning	Yes		
30	PowerSupply	DC12V,PoE(802.3at/af)		
31	OperatingConditions	-30°C~+60°C		
32	IngressProtection	IP67IngressProtection		
33	Certifications	CE/FCC/BIS		
Camera&NVRshouldbefromsameOEMforsmoothintegration.				

8-Port Gigabit Unmanaged PoE Switch

PoE Port	8 × gigabit PoE ports, RJ45 port, full duplex, MDI/MDI-X adaptive
PoE standard	IEEE 802.3af, IEEE 802.3at
UP Link port	1 × gigabit RJ45 port, and 1 × gigabit SFP fiber optical port
Plug-&-Play	supports plug-and-play for easy installation
Network protocol	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, IEEE 802.3ab, IEEE 802.3z
Switching Capacity	20 Gbps
Forwarding Rate	14.88 Mpps
Forwarding Mode	Store-and-forward
MAC Address Table	4K MAC address entries
PoE Power Budget	110 W
Power Supply	48 VDC, 2.5 A
Surge Protection	6 KV
Working Temperature	0°C-40°C , Humidity: 10%-90% (non-condensing)

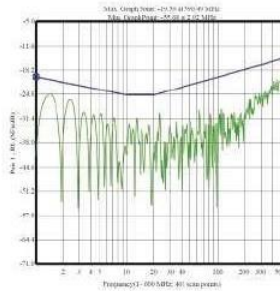
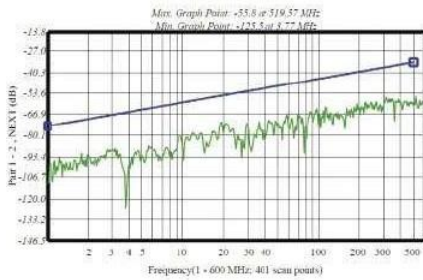
Floor Standing Steel Enclosure's

- Floor Standing Steel Enclosure's designed for Servers
- Top and bottom Panel with ventilation and cable entry facility,
- Provision to mount the cooling fans on the top panel,
- Racks is 17U with 600mm depth and 800 width configurations.
- Front & Rear Door, Side Panels, Cable Manager.
- Fans and Fan Modules. Hardware Packet, Jacking Feet , Lockable Toughened Glass Door, Steel Single, Steel Dual

CCTV CABLE Cat 6 Cable

◆ TRANSMISSION CHARACTERISTICS PER 100M

Frequency MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.0	18.0	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5
500	45.3	15.2	33.8	31.8	13.8	10.8	4.5	2.8
600	51	14.5	31.2	29.9	11.8	8.6	3.5	2.1



◆ MECHANICAL PROPERTIES

- Bending Radius: < 25.4mm at $-20^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Pulling Force: 11.5 Kg
- Operating Temperature Range: -20°C to $+70^{\circ}\text{C}$
- Storage Temperature Range: 0°C to $+50^{\circ}\text{C}$

◆ CONNECTION SYSTEM

Compatible with all common systems according to TIA/EIA 568-C.2 and ISO/IEC 11801 Class E

◆ PACKING

Reels of guaranteed 305m Length

◆ ORDERING INFORMATION

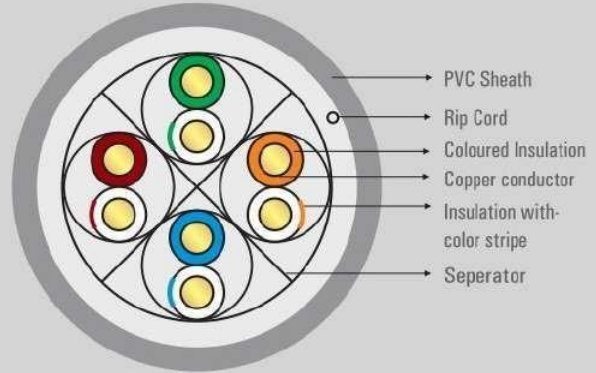
Part Code	Description
NCB-C6UGRYR-305	CAT6 UTP 23AWG Solid: 305M

CCTV CABLE Cat 6 Cable

APPLICATION

Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 baseT) standard. Performance verified up to 600 Mhz
This cable well exceeds the requirements of ANSI/TIA-568-C.2 category6 ISO 11801 Class E

Approval : UL Listed  & ETL Verified



CONSTRUCTION

- Conductor: **23 AWG Solid bare Copper (4 pair)**
- Insulation: **High Density Polyethylene**
- Pairs: **2 Insulated conductors twisted together**
- Sheath: **FR-PVC**
Insulation thickness 0.2mm nominal
- Cable Diameter: **6.1 mm nominal**
- Cable wt per Box: **13.6 Kgs nominal**
- Printing: **Each meter printed with sequential Length Counter**

◆ ELECTRICAL PROPERTIES

- Characteristic Impedance: **100 ± 15Ω**
- Conductor Resistance: **≤ 9.38 Ω /100m**
- Insulation Resistance: **100M Ω**
- Mutual Capacitance: **< 5.6nF/100m**
- Resistance Unbalance: **5% Max**
- Capacitance Unbalance: **330pF/100m**
- Delay Skew: **< 45nS**
- NVP (%): **69%**
- Operating Voltage: **72V**
- Dielectric Strength: **1.0KV dc or 0.75KV ac for 1min**

◆ COLOR CODE

PAIR NO	COLOR	PAIR NO	COLOR
1-2	White-Orange Stripe and Orange	3-6	White-Green Stripe and Green
4-5	White-Blue Stripe and Blue	7-8	White-Brown Stripe and Brown

Outdoor Armour Fiber 6 Core

APPLICATION

- Suitable for Indoor & Outdoor (duct), aerial, pipeline.
- Excellent waterproofing performance.
- Lightweight, Small, Compact cable size

DESCRIPTION

- Central Loose tube with jelly compound.
- E-glass strength members.
- Sequential Meter Marking.

STANDARDS

- ISO 11801
- IEC 60793-1/60794-1-2
- ITU-TREC G.652D
- Telcordia GR-20-core

Mechanical & Environment Characteristics:

Operating Temperature	-20degC to +60degC
Storage Temperature	-40degC to +60degC
Jacket Material	HDPE/LSZH

Fiber Count	HDPE/LSZH Outer Diameter (mm)	HDPE/LSZH Thickness of Jacket (mm)	HDPE/LSZH Nominal Cable Weight (kg/km)	Pulling Tension IEC 60794-1-2-E1		Crush Load IEC 60794-1-2-E3 (N/100mm)		Bend Radius (mm) IEC 60794-1-2-E1 IEC 60794-1-2-E6	
				Short Term (N)	Long Term (N)	Short Term	Long Term	Short Term	Long Term
4	6.8±0.3/6.2±0.3	1.8±0.2/1.4±0.2	34/45	1500	600	1000	300	20D	10D
?l/; ;mnc 6	6.8±0.3/6.2±0.3	1.8±0.2/1.4±0.2	34/45	1500	600	1000	300	20D	10D

Characteristics (cabled) Single-Mode-Matched-Cladded optical fibers according to ITU

Fiber-Type & Refractive Index	Mode-Field/Cladding Diameter (µm)	Wavelength (nm)	Dispersion (ps/(nm·km))	PMD (ps/km)	Cable Cut-off Wavelength (nm)
9/125/G.652D	9.2±0.4	1310	≤3.5	≤0.2	≤1260
1.4670/1.4675	125 ± 0.7	1550	≤18		

NVR 32 Channel 4 SATA Interfaces ,Decoding Format H.265+

Video/ Audioinput	IPvideoinput			32-ch
	Incoming bandwidth			256Mbps
	Outgoing bandwidth	160Mbps		
Video/ Audiooutput	HDMIoutput resolution	4K(3840×2160)/30Hz,2K(2560×1440)/60Hz,1920×1080/60Hz,1600×1200/60Hz,1280×1024/60Hz,1280×720/60Hz,1024×768/60Hz		
	VGAoutput resolution	1920×1080/60Hz,1280×1024/60Hz,1280×720/60Hz,1024×768/60Hz		
	Audiooutput	1-ch,RCA(Linear,1kΩ)		
Decoding	Decodingformat	H.265/H.265+/H.264/H.264+/MPEG4		
	Recording resolution	8MP/6MP/5MP/4MP/3MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF		
	Synchronous playback			16-ch
	Capability	2-ch@8MP(25fps)/4-ch @4MP(30fps)/8-ch@1080p (30fps)		
Network management	Network protocols	TCP/IP,DHCP,Hik-Connect,DNS,DDNS,NTP,SADP,SMTP,NFS,iSCSI, UPnP™, HTTPS		
Harddisk	SATA	4SATAinterfaces		
	Capacity	Upto6TBcapacityforeachHDD		
External interface	Two-wayaudio	1-ch,RCA(2.0Vp-p,1kΩ)		
	Networkinterface	1RJ-4510/100/1000Mbpsself-adaptiveEthernetinterface		
	Serialinterface	1RS-485(half-duplex),1RS-232,1keyboard(optional)		
	USBinterface	Frontpanel:2×USB2.0;Rearpanel:1×USB3.0		
	Alarmin/out	16/4		
POEInterface	Interface	8,RJ-4510/100Mbps self-adaptive Ethernet interface	16,RJ-4510/100Mbpsself-adaptive Ethernet interface	
	Power	≤200W		
	Supported standard	IEEE802.3af/at		
General	Power supply	100to240VAC		
	Power	≤300W		
	Consumption (withouthard disk)	≤20W(without enabling PoE)		
	Working temperature	-10°Cto55°C(14°Fto131°F)		
	Workinghumidity	10to90%		
	Dimensions (W×D ×H)	445×400×71mm(17.5"×15.7"× 2.8")		
	Weight (withouthard disk)	≤5kg(11.lb)		

Poe Switch 24 Port 10/100/1000 Mbps Switch With 2 SFP Port

Network parameters	Port number	24×Gigabit PoE ports, 2×Gigabit SFP fiber optical ports
	Port type	RJ45 port, full duplex, MDI/MDI-X adaptive
	Standard	IEEE802.3, IEEE802.3u, IEEE802.3x, IEEE802.3ab, IEEE802.3z
	Forwarding mode	Store-and-forward switching
	MAC address table	8K
	Switching capacity	52Gbps
	Packet forwarding rate	38.688Mpps
	Internal cache	4.1Mbits
PoE power supply	PoE standard	IEEE802.3af, IEEE802.3at
	PoE power pin	Ethernet cable 1/2/3/6 provide power supply.
	PoE port	Ports 1 to 24
	Max. port power	30W
	PoE power budget	225W
	Max. power consumption	250W
General	Shell	Metal material with a fan equipped.
	Net weight	2.920kg (6.44lb)
	Gross weight	4.120kg (9.08lb)
	Dimension (L×H×D)	440mm×44mm×220.8mm (17.3"×1.7"×8.7")
	Operating temperature	-10°C to 55 °C (14 °F to 131°F)
	Storage temperature	-40°C to 85 °C (-40°F to 185°F)
	Operating humidity	5% to 95% (no condensation)
	Storage humidity	5% to 95% (no condensation)
	Power supply	100 to 240VAC, 50/60Hz, 4A (Max)
	Power consumption in idle	25W

Led TV 32 Inch with Wall Mount Stand

- Resolution: HD Ready (1366x768) | Refresh Rate: 60 hertz
- Connectivity: 2 HDMI ports to connect set top box, Blu Ray players, gaming console | 1 USB ports to connect hard drives and other USB devices
- Sound output: 10 Watts Output | 2 Speakers | DTS Virtual:X | Sound Type : Down FiringSmart
- TV Features: Web OS Smart TV | Wi-Fi | Home Dashboard | Screen Mirroring | Mini TV Browser | Multi-Tasking | Office 365, Set WXHD (with Stand) mm - 739 x 472 x 168Display: Active HDR | Display Type: Flat | BackLight Module: Slim LED

Surveillance Hard Disk - 4 TB

Specifications	
SkyHawk™ Health Management Included	Yes
Interface	SATA 6Gb/s
Features and Performance	
Drive Bays Supported	Up to 16
Cameras Supported	Up to 64
RV Sensors	Yes
Max. Sustained Transfer Rate (MB/s)	195MB/s
Cache (MB)	256
Reliability/Data Integrity	
Tarnish Resistant	Yes
Load/Unload Cycles	300,000
Nonrecoverable Read Errors per Bits Read, Max	1 per 10 ¹⁵
Power-On Hours per Year (24x7)	8760
Workload Rate Limit (WRL) ²	180
MTBF	1,000,000hr
Warranty, Limited (years) ³	3
Power Management	
Startup Current, Typical (12V, A)	2
Average Operating Power (W)	9W
Idle Average (W)	7.2W
Standby Mode/Sleep Mode, Typical (W)	0.6/0.6
Voltage Tolerance (5V)	±5%
Voltage Tolerance (12V)	±10%
Environmental/Temperature	
Operating (ambient, min °C)	5
Operating (drive case, max °C) ⁴	70
Nonoperating (ambient, min °C)	-40
Physical	
Height (mm/in, max)	26.11mm/1.028in
Width (mm/in, max)	101.85mm/4.01in
Depth (mm/in, max)	146.99mm/5.787in
Weight (g/lb)	705g/1.55lb
Carton Unit Quantity	20
Cartons per Pallet/Cartons per Layer	40/8

Key Advantages

ImagePerfect™ firmware is designed to ensure seamless video footage capture in 24x7 surveillance workloads¹ that record video from 64 HD cameras.

SkyHawk Health Management actively helps protect your surveillance storage by focusing on prevention, intervention, and recovery options.² Included is RAID RapidRebuild™, which provides 3x faster volume rebuilds over traditional RAID rebuilds.

RV sensors built in allow drives to maintain performance in multi-bay systems, giving customers the flexibility to scale their systems when more storage is needed.

ATA streaming support enables recordings from up to 64 HD cameras for smooth, uninterrupted footage.

1M hours MTBF, 3-year limited warranty³ represents an improved total cost of ownership (TCO) with reduced maintenance costs.

Lower power consumption means a reduction in heat emissions, which improves reliability in surveillance solutions. Tarnish-resistant components help protect drive from environmental elements, increasing field reliability.

Unparalleled data protection with an optional 2-year Rescue Data Recovery Services plan, providing access to Seagate's secure labs with industry-leading data recovery success rates.

Best-Fit Applications

- Network video recorders (NVR)
- Surveillance DVRs

Sd/-
Ex-Officio Director,
Garchumuk Zoological Park &
Divisional Forest Officer, Howrah Division