



# GUSHKARA MAHAVIDYALAYA

NAAC Accredited 'B++' (Cycle-3)

P.O. GUSHKARA, DIST. PURBA BARDHAMAN, PIN 713128, W.B.

Phone: (03452) 255 105, Email: guskaramahavidyalaya@gmail.com

## Tender Reference No.: GM/CCTVINST/NIT-4/2025

E-tenders are invited from eligible bonafide parties with requisite credentials for SITC of CCTV system of the college. Rates should be quoted in the prescribed format (standardized BOQ format).

All the relevant documents, **Specification (Annexure-1)** etc. should be downloaded by the interested bidders from the website: <https://wbtenders.gov.in> Any addendum/corrigendum/Extension of validity period will be notified at the aforesaid e-Tendering portal: <https://wbtenders.gov.in> Bidders are requested to go through the following very carefully before submission of bids. When a bidding firm submits their tender in response to this NIT, they will be deemed to have understood fully the contents, the requirements, terms & conditions of this tender.

### A. SITC of CCTV system of the College:

- **Login by bidder:** A bidder desirous of taking part in an e-tender invited by a State Government shall login to the e-Procurement portal of the Government of West Bengal using their login ID and password using valid DSC.

### B. Eligibility of Bidder:

- The bidder must be an eligible bonafide party with requisite credentials. Certificates/ Authorization must be submitted online in support of the claim.

### C. Validity of Bid:

- The tendered rate shall be valid till 1 year from the date of acceptance.

### Documents:

- Bidders shall submit their Valid License, GST Certificate, PAN No. and P.Tax, Bank Account No., Credentials in support of SITC of CCTV system from any Govt./Govt. Aided undertaking valued at not less than Rs. 2 lakhs.
- Bidders must have an office and service centre in West Bengal. Supporting documents should be submitted.
- The intending bidders must upload make, model no. and technical compliance (Datasheet) for different items of their offer under the technical cover, otherwise bid will be cancelled.
- All cost of SITC must be included in the bid and further no charges will be paid.

### Criteria:

- The product must be **"Made in India"**. The manufacturer should have over **5 years** of experience in manufacturing networking equipment.
- The bidder must have a local service centre and a local representative to ensure quick response (please mention the time).

- The CCTV components should comply with “**Make in India**” policy and guidelines as laid by Government of India. The CCTV components should also comply with all subsequent guidelines and orders published by various departments of Government of India such as Department of Expenditure (Ministry of Finance), STQC certified etc.
- The camera should be from a genuine manufacture and should have official valid H.265 HEVC certificate and should be list on HEVC website at the time of submitting bid. They should be paying the licensed fee for using the genuine HEVC compression legally.

**D. Others: -**

- The bid price must be final price inclusive of Supply of Materials, Installation, Wiring and Connectivity, Labour hiring charges, Testing, Commissioning & Cost of Carriage etc.**
- The prospective bidder shall have to execute the work in such a manner so that appropriate service level of the work is maintained during the contract period. If any deficiency / damage is found during the period as mentioned above, the Bidder shall be held responsible. The bidder may quote the rate considering the above aspects. The intending Bidders shall clearly understand that whatever may be the outcome of the present invitation of Bids, no cost of Bidding shall be reimbursable by the College.
- The College authority does neither bind itself to accept the lowest rates of any tender nor to assign any reason thereto for non-acceptance of the tender.
- The college authority has the full right to check/verify the original copy of documents submitted by the bidder at any point during the e-tendering process.

It is obligatory for the bidder to maintain the time schedule for completion of the project. In case of delay successful bidder will be held responsible & action will be taken as per condition of tender as laid down herein without prejudice. Any sort of plea for Part Performance / No Performance / Defective Performance against work order, will not be considered and this will include incidents occurring due to acts of God.

- EMD amounting **Rs. 25,000/-** (Rupees twenty-five thousand only) and Tender Fee **Rs. 1,000/-** (Rupees one thousand only) should be deposited in bank account of the college. Name of account: **Gushkara Mahavidyalaya**, Account No. **11254335094**, Name of Bank: **SBI**, Branch: **Itachanda**, IFS Code: **SBIN0006193**. Photocopies of documents of deposited amount should be attached.

**F. Payment:**

- Tax Invoice and the Challan against the work is/are to be sent in DUPLICATE and should invariably be submitted along with supplies.
- Payment shall be made after completion of the work order satisfactorily in all respects. No interest shall be paid to the firm if the payment is delayed due to whatever reasons. In no circumstances, delivery schedule should be affected & or linked with the payment of outstanding bills. The payment of bills shall be withheld, in case of violation of any tender terms & conditions.

### **Date & Time Schedule**

Sl.No.	Particulars	Date	Time
1.	NIT publication date	04.09.2025	14:00 p.m.
2.	Bidding starts	04.09.2025	14:00 p.m.
3.	Bidding closing	12.09.2025	18:00 p.m.
4.	Bid opening date	15.09.2025	13:00 p.m.

**Bid Opening Location:** Gushkara Mahavidyalaya, P.O. Gushkara, Dist. Purba Bardhaman, PIN 713128, W.B., India.

Sd/- Dr. S. Chatterjee  
Principal  
Gushkara Mahavidyalaya

## Instructions to Bidders

### General guidance for E-Tendering:

The following are the instructions / guidelines for electronic submission of the tenders for assisting the Manufacturer/Authorized Dealers/Suppliers to participate in E-Tendering:

- I. **Registration:** Any eligible manufacturer / authorized concerns willing to take part in the process of E-Tendering will have to be enrolled & registered with the Government e-procurement system, through logging on to <https://wbtenders.gov.in>
- II. **Digital Signature Certificated (DSC):** Each Manufacturer/Authorized Dealers/Suppliers is required to obtain a Class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders for the approval service of the National Informatics Centre (NIC) on payment of requisite amount. Details are available at the website stated in Clause-I above. DSC is given as a USB e-Token.
- III. The Manufacturer/Authorized Dealers/Suppliers can search and download the NIT and Tender Document(s) electronically from computer once he logs on to the website mentioned in Clause-I using the Digital Signature Certificate. This is the only mode of collection of Tender Documents.
- IV. **Submission of Tenders:** Tenders are to be submitted online to the website stated in Clause-I in two folders, one in Technical Proposal & the other is Financial Proposal before the prescribed date & time using the Digital Signature Certificate (DSC). Virus scanned and digitally signed copies of the documents are to be uploaded. The documents will get encrypted (transformed into non-readable formats).
- V. **Technical Proposal:** The Technical Proposal should contain scanned copies of the following cover (folder):

a) **Statutory Cover** Containing the following documents –

i. NIT (Online)

b) **Non-Statutory Cover** Containing the following documents –

Sl. No.	Category	Sub-Category	Details
1.	Certificates	Certificates	<ul style="list-style-type: none"><li>• Manufacturer/Authorized Dealer/Authorized Supplier</li><li>• GST Registration</li><li>• PAN</li><li>• P.Tax (Challan)</li><li>• IT receipt</li><li>• Credentials of supplying previously the same to the Govt./Govt. Aided undertaking</li><li>• STQC</li></ul>
2.	Company Details	Company details	<ul style="list-style-type: none"><li>• Trade License</li></ul>

## **VI. Financial Proposal:**

- a) **BOQ:** The Financial Proposal should contain Bill of Quantities (BoQ) in two covers (folder). The contractor is to quote the rate online through computer in the space marked for quoting rate in the BOQ after downloading the prescribed format from the website.

## **Opening & Evaluation of Tender:**

- I. **Opening of Bid Proposal: Nodal Officer and Procurement Officers** will open the bids of the Tender in presence of the **members of Purchase & Tender Sub-Committee**.
- II. **Intending tenderers may remain present if they so desire.**
- III. Cover (folder) for Statutory Documents will be opened first and if found in order, cover (folder) for Non-Statutory Documents will be opened. If there is any deficiency in the Statutory Documents the tender will summarily be rejected.
- IV. Decrypted (transformed into readable formats) documents of the Non-Statutory cover will be downloaded and handed over to the Purchase & Tender Sub-Committee.
- V. Summary list of technically qualified tenderers will be uploaded online.
- VI. Pursuant to scrutiny and decision of the Purchase & Tender Sub-Committee the Summary List of eligible tenderers and the serial number of work for which their proposal will be considered will be uploaded in the web portals.
- VII. During evaluation the committee may summon the tenderers and seek clarification/ information or additional documents or original hard copy of any of the documents already submitted and if these are not produced within the stipulated time frame, their proposals will be liable for rejection.

Sd/- Dr. S. Chatterjee  
Principal  
Gushkara Mahavidyalaya

## **Terms and Conditions**

1. **Authorized Representative of Manufacturer or Authorized Concern:** The Manufacturer or Authorized Concern shall not assign the agreement or sublet any portion of the work. The Manufacturer or Authorized Concern, May however, appoint an authorized representative in respect of one or more of the following purposes only.
2. **Supplementary/Additional Items of works:** Notwithstanding the provisions made in the related printed tender form, any items of the work which can be legitimately be considered as not stipulated in the specific price schedule of probable items of work but has become necessary as a reasonable contingent item during actual execution of work will have to be done by the contractor.
3. **Commencement and timely completion of work:** All the supply and the work must have to be completed in all respects within the time specified in notice inviting Tender from the date of commencement as mentioned in work order. Time for completion as specified in the tender shall be deemed to be the essence of the contract.
4. **Programme of work:** Before actual commencement of work the concern shall submit a programme of work with methodology clearly showing the required materials, men and equipment. The concern must pray in writing showing sufficient reasons therein for modification of programme.

**NVR TYPE: 32 Channel (32 Channel IP Support)**  
**NVR Specification**  
**SPECIFY NVR MAKE & MODEL NO ALONG WITH DATA SHEET :**

**Make:**

**Model No.**

SL. NO.	Parameters	Value	Compliance (YES/NO)	Remarks
1	Processor	Industrial-grade processor		
2	Operating System	Embedded LINUX		
3	IP Camera Input	32 Channels		
4	User Interface	Web, Local GUI		
5	Video Output	1-channel VGA, 1-channel HDMI video output. HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 *Simultaneous/heterogeneous video sources output for VGA and HDMI is configurable.		
6	Video Compression	H.265, H.264, MJPEG		
7	Encode Strategy	Instastream		
8	Decoding Capability	AI disabled: 2-channel 16 MP@30 fps, 2-channel 12 MP@30 fps, 4-channel 8 MP@30 fps, 6-channel 5 MP@30 fps, 8-channel 4 MP@30 fps, 16-channel 1080p@30 fps AI enabled: 1-channel 16 MP@30 fps, 2-channel 12 MP@30 fps, 3-channel 8 MP@30 fps, 4-channel 5 MP@30 fps, 6-channel 4 MP@30 fps, 12-channel 1080p@30 fps		
9	Video Resolution	16 MP, 12 MP, 8 MP, 6 MP, 5 MP, 4 MP, 3 MP, 2MP, 960p, 1MP, D1, CIF		
10	Video Display Split	Main screen: 1/4/8/9/16/25/36 Sub screen: 1/4/8/9/16		
11	AI by NVR	Face detection, face recognition, perimeter protection, SMD Plus		
12	AI by Camera	Face detection, face recognition, perimeter protection, SMD Plus, ANPR, people counting, stereo analysis, heat map		
13	Perimeter Performance AI by NVR	2 channels, 10 IVS rules for each channel		
14	Perimeter Performance of AI by Camera	8 channels		
15	Face Attributes	Gender, age group, glasses, expressions, face mask, beard		
16	Face Detection AI by NVR	1 channels (up to 12 face images/s each channel)		
17	Face Detection AI by Camera	8 channels		
18	Face Database Capacity	Up to 10 face databases with 200,00 images, with a total capacity of 2.5 GB. Name, gender, birthday, address, credential type, credential No., countries & regions and state can be added to each face image		
19	Face Recognition AI by NVR	8-channel FD (by camera) + FR (by recorder), image stream: 12 face images/s 1-channel FD (by recorder) + FR (by recorder), video stream: 12 face images/s		
20	Face Recognition AI by Camera	8 channels		
21	License Plate Database Capacity	1. Create up to 20,000 plate numbers 2. Blocklist and allow list		
22	ANPR by Camera (Number of Channels)	4 channels		
23	SMD Plus by NVR	4 channels		
24	SMD Plus by Camera	8 channels		

**NVR TYPE: 32 Channel (32 Channel IP Support)**  
**NVR Specification**  
**SPECIFY NVR MAKE & MODEL NO ALONG WITH DATA SHEET :**

**Make:**

**Model No.**

SL. NO.	Parameters	Value	Compliance (YES/NO)	Remarks
25	Network Bandwidth	AI disabled: 256 Mbps incoming, 256 Mbps recording and 256 Mbps outgoing AI enabled: 180 Mbps incoming, 180 Mbps recording and 180 Mbps outgoing		
26	Smart Phone	iPhone, iPad, Android Phone		
27	Network Mode	Multi-address mode, load balance, fault tolerance and other network port binding modes		
28	Interface Ports	3(1 front USB 2.0 port, 2 rear USB 3.0 ports), 1 HDMI, 1 VGA, 1 RS232, 1 eSATA Port, 1 RS485		
29	Protocols	HTTP, HTTPS, TCP/IP, IPv4/IPv6, RTSP, UDP, SNMP, NTP, DHCP, DNS, SMTP, UPnP, IP Filter, PPPoE, FTP, DDNS, Alarm Server, IP Search, Multicast, InstaOn cloud, Auto Registration, ONVIF 2.1.12(Profile T, Profile S, Profile G)		
30	Ethernet	2 (10/100/1000 Mbps Ethernet port, RJ-45)		
31	Browser	Chrome, IE9 and later, Firefox, Edge		
32	Abnormality Alarm	Camera offline, storage error, disk full, IP conflict, MAC conflict, login lock, cybersecurity exception		
33	Intelligent Alarm	Face detection, face recognition, perimeter protection, SMD Plus, people counting, stereo analysis, heat map		
34	General Alarm	Motion detection, privacy masking, local alarm		
35	Alarm Linkage	Record, snapshot, IPC external alarm output, audio, buzzer, log, preset, email		
36	Alarm Input	16 channel		
37	Alarm Output	4 channels		
38	Audio Input	1-channel RCA		
39	Audio Output	1-channel RCA		
40	Audio Compression	G.711a, G.711u, PCM, G726, AAC		
41	Hard Disk	4 SATA ports, up to 16TB each. The maximum HDD capacity varies with environment temperature		
42	Disk Group	Support		
43	Multi-channel Playback	Up to 16 channels		
44	Record Mode	General, motion detection, intelligent, alarm, POS		
45	Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)		
46	Backup Method	USB device and network		
47	Power Supply	100–240 VAC, 50-60 Hz		
48	Power Consumption	≤ 10 W (without HDD)		
49	Operating Temperature	-10 °C to +55 °C (14 °F to +131 °F)		
50	Operating Humidity	10%–93% (RH)		
51	Storage Temperature	-20 °C to +60 °C (–4 °F to +140 °F)		



**ANNEXURE - 1**  
**ITEM SPECIFICATION**  
**Camera Type: 2 MP Dual Light Dome Camera**  
**Camera specification**  
**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
1	Image Sensor	1/2.8" 2MP PS CMOS Image Sensor (0.9071 Cen		
2	Effective Pixels	1920 (H) × 1080 (V)		
3	Minimum Illumination	0.005 lux@F1.6 (Color, 30 IRE), 0.0005 lux@F1.6 (B/W, 30 IRE), 0 lux (IR on)		
4	Angle Adjustment	Pan: 0°–360°, Tilt: 0°–78°, Rotation: 0°–360°		
5	Shutter Speed	Auto/Manual 1/3 s–1/100,000 s		
6	RAM	128 MB		
7	ROM	128 MB		
8	White Balance	Auto, Natural, Street lamp, Outdoor, Manual, Regional custom		
9	Gain Control(AGC)	Auto/Manual		
10	Lens Type	Fixed-focal		
11	Max. Aperture	F1.6		
12	Lens Mount	M12		
13	DORI Distance	Lens 3.6mm: 58.9 m (Detect), 23.6 m (Observe), 11.8 m (Recognize), 5.9 m (Identify)		
14	Close Focus Distance	1.3 m		
15	Lens	3.6mm fixed Lens		
16	S/N Ratio	>56dB		
17	IR Number	1 (Multi-core (IR + warm) light)		
18	IR	IR Range of 30 Mtr.		
19	Warm Light	Warm Light Range of 30 Mtr.		
20	Video Compression	H.265, H.264, H.264H, H.264B, MJPEG (Only supported by the sub stream)		
21	Day/Night	Auto(ICR)/Color/B/W		
22	Angle of View	3.6 mm: H: 87°, V: 44°, D: 105°		
23	Back Light Compensation	BLC/ HLC/ DWDR		
24	IR Control	Auto, Manual		
25	Noise Reduction	3D NR		
26	Resolution	2MP (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)		
27	Stream Capability	Triple stream		
28	Frame Rate	Main stream: 2M P(1920 × 1080)@1–25/30fps		
		Sub stream 1: 720p (1280 × 720), D1 (704 × 576)@1–25fps/ (704 × 480)@1–30fps, VGA (640 × 480)@1–30fps, CIF (352 × 240)@1–30fps/ (352 × 288)@1–25fps		
		Sub stream 2: D1 (704 × 576)@1–25fps/ (704 × 480)@1–30fps, VGA(640 × 480)@1–30fps, CIF (352 × 240)@1–30fps/ (352 × 288)@1–25fps		

**Camera Type: 2 MP Dual Light Dome Camera**  
**Camera specification**  
**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
29	Smart search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos		
30	Motion Detection	OFF/ON (4 areas, rectangular)		
31	Video format	PAL/NTSC		
32	Privacy Mask	4 areas		
33	ROI	Support (4 areas)		
34	OSD	Camera title, date & time		
35	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC		
36	Human Body Detection	Support the classification and accurate detection of human		
37	Protocol	SFTP, IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, SNMP V3, TLS Version 1.2, TCP/IP, PPPoE, NFS, UDP, ICMP, IGMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), unicast, multicast		
38	SDK and API	Support		
39	Cyber Security	AES 256-bit Encryption, configuration encryption, trusted execution, digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
40	Mirror Fun	Support		
41	Audio	Built-in Mic		
42	Smart IR	Support		
43	Smart Illumination	Support		
44	Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2M resolution and lower)		
45	Alarm Event	Network disconnection, IP conflict, illegal access, motion detection, video tampering, audio detection, SMD (human & motor vehicle), security exception		
46	Iris Control	Fixed		
47	Ethernet	RJ-45 (10/100 Base-T)		
48	Bit Rate Control	CBR/VBR		
49	Bit Rate	H.265: 3 kbps-6144 kbps, H.264: 8 kbps-6144 kbps		
50	User/Host	6 (Total bandwidth: 36 M)		
51	Browser	IE, Chrome, Firefox		
52	Certificates	ISO 9001: 2015, ISO 20000-1 : 2018, CE, FCC and RoHS, BIS, STQC approved compliance report (STQC certificate must provide with website link)		
53	Power Source	12 VDC/PoE (802.3af)		
		Basic: 1.4 W (12 VDC), 2.2 W (PoE);		

**Camera Type: 2 MP Dual Light Dome Camera**  
**Camera specification**  
**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

**Make:**

**Model No.**

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
54	Power Consumption	Max.: 3.3 W (12 VDC), 4.4 W (PoE) (H.265 + intelligence on + warm light intensity)		
55	Weatherproof Standard	IP67		
56	Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)		
57	Operating Humidity	≤95% (RH), non-condensing		
58	Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)		
59	Storage Humidity	≤95%(RH), non-condensing		
60	Casing	Metal + Plastic		

**Camera Type: 2 MP Dual Light Bullet Camera**  
**Camera specification**  
**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
1	Image Sensor	1/2.8" 2MP PS CMOS Image Sensor (0.9071 Cen		
2	Effective Pixels	1920 (H) × 1080 (V)		
3	Minimum Illumination	0.005 lux@F1.6 (Color, 30 IRE), 0.0005 lux@F1.6 (B/W, 30 IRE), 0 lux (IR on)		
4	Angle Adjustment	Pan: 0°–360°, Tilt: 0°–78°, Rotation: 0°–360°		
5	Shutter Speed	Auto/Manual 1/3 s–1/100,000 s		
6	RAM	128 MB		
7	ROM	128 MB		
8	White Balance	Auto, Natural, Street lamp, Outdoor, Manual, Regional custom		
9	Gain Control(AGC)	Auto/Manual		
10	Lens Type	Fixed-focal		
11	Max. Aperture	F1.6		
12	Lens Mount	M12		
13	DORI Distance	Lens 3.6mm: 58.9 m (Detect), 23.6 m (Observe), 11.8 m (Recognize), 5.9 m (Identify)		
14	Close Focus Distance	1.3 m		
15	Lens	3.6mm fixed Lens		
16	S/N Ratio	>56dB		
17	IR Number	1 (Multi-core (IR + warm) light)		
18	IR	IR Range of 30 Mtr.		
19	Warm Light	Warm Light Range of 30 Mtr.		
20	Video Compression	H.265, H.264, H.264H, H.264B, MJPEG (Only supported by the sub stream)		
21	Day/Night	Auto(ICR)/Color/B/W		
22	Angle of View	3.6 mm: H: 87°, V: 44°, D: 105°		
23	Back Light Compensation	BLC/ HLC/ DWDR		
24	IR Control	Auto, Manual		
25	Noise Reduction	3D NR		
26	Resolution	2MP (1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720), D1 (704 × 576/704 × 480), VGA (640 × 480), CIF (352 × 288/352 × 240)		
27	Stream Capability	Triple stream		
28	Frame Rate	Main stream: 2MP(1920 × 1080), 1.3MP (1280 × 960), 720p (1280 × 720) @ 25/30fps		
		Sub stream 1: 720p/D1/VGA/CIF @25/30fps		
		Sub stream 2: D1/VGA/CIF @25/30fps		
29	Smart search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to		
30	Motion Detection	OFF/ON (4 areas, rectangular)		
31	Video format	PAL/NTSC		
32	Privacy Mask	4 areas		
33	ROI	Support (4 areas)		

**Camera Type: 2 MP Dual Light Bullet Camera**  
**Camera specification**  
**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
34	OSD	Camera title, date & time		
35	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC		
36	Human Body Detection	Support the classification and accurate detection of human		
37	Protocol	SFTP, IPv6, IPv4, DNS, RTCP, NTP, RTP, HTTP, HTTPS, SNMP V3, TLS Version 1.2, TCP/IP, PPPoE, NFS, UDP, ICMP, IGMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), unicast, multicast		
38	SDK and API	Support		
39	Cyber Security	AES 256-bit Encryption, configuration encryption, trusted execution, digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
40	Mirror Fun	Support		
41	Audio	Built-in Mic		
42	Smart IR	Support		
43	Smart Illumination	Support		
44	Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2M resolution and lower)		
45	Alarm Event	Network disconnection, IP conflict, illegal access, motion detection, video tampering, audio detection, SMD (human & motor vehicle), security exception		
46	Iris Control	Fixed		
47	Ethernet	RJ-45 (10/100 Base-T)		
48	Bit Rate Control	CBR/VBR		
49	Bit Rate	H.265: 3 kbps-6144 kbps, H.264: 8 kbps-6144 kbps		
50	User/Host	6 (Total bandwidth: 36 M)		
51	Browser	IE, Chrome, Firefox		
52	Certificates	ISO 9001: 2015, ISO 20000-1 : 2018, CE, FCC and RoHS, BIS, STQC approved compliance report (STQC certificate must provide with website link)		
53	Power Source	12 VDC/PoE (802.3af)		
54	Power Consumption	Basic: 1.4 W (12 VDC), 2.2 W (PoE); Max.: 3.3 W (12 VDC), 4.4 W (PoE) (H.265 + intelligence on + warm light intensity)		
55	Weatherproof Standard	IP67		
56	Operating Temperature	-40 °C to +60 °C (-40 °F to +140 °F)		
57	Operating Humidity	≤95% (RH), non-condensing		
58	Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)		
59	Storage Humidity	≤95%(RH), non-condensing		
60	Casing	Metal + Plastic		

**Camera Type: 4MP 120dB WDR Bullet Camera****Camera Specification:**

SPECIFY CAMERA MAKE &amp; MODEL NO. ALONG WITH DATA SHEET

**Make:****Model No.**

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
1	Image Sensor	1/2.8" 4MP PS CMOS Image Sensor (0.9071 centimeters)		
2	Effective Pixels	2688 (H) × 1520 (V)		
3	Minimum Illumination	0.001 lux@F1.4 (Color, 30 IRE), 0.0001 lux@F1.4 (B/W, 30 IRE), 0 lux (IR on)		
4	Angle Adjustment	Pan: 0°–360°, Tilt: 0°–90°, Rotation: 0°–360°		
5	Shutter Speed	Auto/Manual 1/3 s–1/100,000 s		
6	RAM/ROM	128 MB/128 MB		
7	White Balance	Auto, Natural, Street lamp, Outdoor, Manual, Regional custom		
8	Gain Control(AGC)	Auto/ Manual		
9	Lens Type	Fixed-focal		
10	Max. Aperture	F1.4		
11	Lens Mount	M12		
12	Lens	6mm Fixed Lens		
13	S/N Ratio	>58dB		
14	IR Number	4 IR LED		
15	IR Range	IR Range of 60 Mtr. Or better		
17	Video Compression	H.265, H.264, H.264H, H.264B, MJPEG (only supported by the sub stream)		
18	Angle of View	H: 49°, V: 26°, D: 57°		
19	Back Light Compensation	BLC/ HLC/ WDR (120dB)		
20	Day/Night	Auto(ICR)/Color/B/W		
21	IR Control	Auto, Manual		
23	Noise Reduction	3D NR		
24	Stream Capability	Triple stream		
25	OSD	Camera title, Date & Time		
26	Audio	Built-in Mic		
27	Audio Compression	G.711a, G.711Mu, PCM, G.726, AAC		
28	Bit Rate	H.265: 3 kbps-6144 kbps, H.264: 8 kbps-6144 kbps		
29	Bit Rate Control	VBR, CBR		
30	Ethernet	RJ-45 (10/100 Base-T)		
31	Protocol	SFTP, IPv6, IPv4, DNS,RTCP, NTP, RTP, HTTP, HTTPS, SNMP V3, TLS Version 1.2, TCP/IP, PPPoE,NFS, UDP, ICMP, IGMP, SSL, DHCP, SMTP, RTSPS, ONVIF (Profile S, Profile G, Profile T), unicast, multicast		
32	Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
33	SDK and API	Support		
34	User/Host	6 (Total bandwidth: 36 M)		
35	Mirror Function	Support		
36	Smart IR	Support		
37	Weatherproof Standard	IP67 or better		
38	Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)		
39	Storage temperature	–40 °C to +60 °C (–40 °F to +140 °F)		
40	Power Source	12 VDC/PoE (802.3af)		
41	Browser	IE, Chrome, Firefox		
42	Operating Humidity	≤95%		
43	Storage Humidity	≤95%		
44	Certification	CE, FCC,RoHS,BIS,STQC (STQC certificate must provide with website link)		
45	Close Focus Distance	3.2m		

## Camera Type: 4MP 120dB WDR Bullet Camera

### Camera Specification:

SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
46	DORI distance	124m (detect), 49.6m (observe), 24.8m (recognize), 12.4m (identify)		
47	Video format	PAL/NTSC		
48	Resolution	4MP (2688 x 1520)/ (2560 x 1440), 3MP (2304 X 1296), 2 MP (1920 x 1080), 1.3MP (1280 x 960), 720p (1280 x 720), D1 (704 x 576/704 x 480), VGA (640 x 480), CIF (352 x 288/352 x 240)		
49	Frame Rate	Main stream: 4MP(2688 x 1520)@1-25/30fps, 4MP (2560 X 1440) @1-25/30fps		
		Sub stream 1: 720p (1280 x 720), D1 (704 x 576)@1-25fps/ (704 x 480)@1-30fps, VGA (640 x 480)@1-30fps, CIF (352 x 240)@1-30fps/ (352 x 288)@1-25fps		
		Sub stream 2: D1 (704 x 576)@1-25fps/ (704 x 480)@1-30fps, VGA(640 x 480)@1-30fps, CIF (352 x 240)@1-30fps/(352 x 288)@1-25fps		
50	Motion Detection	OFF/ON (4 areas, rectangular)		
51	Privacy Mask	4 areas		
52	ROI	Support 4 areas		
53	Human Body detection	Support the classification and accurate detection of human		
54	Alarm Event	Network disconnection, IP conflict, illegal access, motion detection, video tampering, audio detection, SMD (human & motor vehicle), security exception		
55	Image rotation	4MP - only support 0°/180°		
		2MP and lower - support 0°/90° 180°/270°		
56	Smart Search	Work together with smart NVR to perform refined intelligent search, event extraction and merging to event videos		
57	Iris Control	Fixed		
58	Power Consumption	Basic: 2 W (12 VDC); 2.9 W (PoE)		
		Max.: (H.265 + intelligence on + WDR + illuminator intensity); 5.3 W (12 VDC), 6.8 W (PoE)		
59	Casing	Metal + Plastic		

## Camera Type: Camera Type: 2 MP 45x Network PTZ Camera

### Camera Specification:

SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
1	Image Sensor	1/2.8" 2MP PS CMOS Image Sensor (0.9071 centimeter)		
2	Effective Pixels	1920(H)x1080(V)		
3	Min Illumination	Color 0.005Lux@F1.6, B/W 0.0005Lux@F1.6, 0Lux@F1.6(IR on)		
4	Focus Control	Auto/Semi-Auto/Manual		
5	RAM /ROM	512MB/256MB		
6	Electronic Shutter	1/1s-1/30000s		
7	White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/Natural light/Street lamp		
8	Lens	3.95 mm~177.75 mm		
9	Close focus distance	0.1 Mtr. – 1 Mtr.		
10	Angle of view	H: 65.7°~1.9°; V: 39.4°~1.1°; D: 73.1°~2.1°		
11	Back Light Compensation	BLC/HLC/WDR (120db)		
12	S/N Ratio	≥ 55 dB		
13	Optical zoom	45x		
14	Digital zoom	16x		
15	Pan/Tilt Range	Pan: 0° to 360° endless, Tilt: -20° to +90°, auto flip 180°		
16	Manual Speed	Pan: 0.1° ~260° /s, Tilt: 0.1° ~120° /s		
17	Special Features	Up to 300 Presets, 5 Pattern, 8 (up to 32 presets per tour) Tour, 5 Scan		
18	Preset speed	Pan 300 Deg/sec, Tilt 200 Deg/sec		
19	IR Distance	300 meter		
20	IR Number	6 (IR)		
21	Privacy Masking	upto 24 areas can be set, with upto 8 areas in the same view		
22	Power off memory	support		
23	Idle Motion	Preset/Scanning/Tour/Pattern		
24	IR Control	Zoom Prio, Manual, Smart IR, Off		
25	Video Compression	H.265, H.264+, H.264H, H.264B, H.264, MJPEG (Sub Stream)		
26	Stream Capability	Quad Stream		
27	Audio Compression	PCM, G.711A; G.711Mu; G.726; MPEG2-Layer2, G722.1		
28	Alarm in/out	7/2 Channel in/out		
29	Audio In & Out	1 Ch in & 1 Ch out		
30	Ethernet	RJ-45 (10/100Base-T)		
31	Protocols	IPv4; IPv6; HTTP; HTTPS; ARP, RTSPS, SMTP; SFTP, DHCP, DNS, UPnP; NTP, Multicast, NFS, PPPoE, SNMP V1/V2/V3, ICMP, IGMP, ONVIF(Profile S, Profile G, Profile T), Unicast, Multicast		



## Camera Type: Camera Type: 2 MP 45x Network PTZ Camera

### Camera Specification:

SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET

Make:

Model No.

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
32	Cyber Security	AES 256-bit Encryption, Configuration encryption, trusted execution, Digest, Security logs, WSSE, account lockout, syslog, video encryption, IP/MAC filtering, HTTPS, trusted upgrade, trusted boot		
33	User/Host	20 (total bandwidth: 64 Mbps)		
34	Operating Temperature	-40°C to +70°C		
35	Operating Humidity	≤ 95% RH, Non condensing		
36	Weather Proof Standard	IP 67, IK 10, TVS 8000V lightning proof, surge protection, voltage transient protection		
37	Power Source	24 VDC, 2.5 A ± 25% PoE+ (802.3at)		
38	Power Consumption	24 vdc, 2.5 A ± 25%: Basic: 13W Max: 25W(illuminator + PTZ), PoE+(802.3at)		
39	Certificates	MTBF certificate from STQC, EMI/EMC, ISO9001, STQC approved compliance report (STQC certificate must provide with website link)		
40	Max. aperture	F1.6-F4.95		
41	Iris Control	Auto/Manual		
42	DORI Distance	2451.7 Mtr.(Detect), 972.9 Mtr.(Observe), 490.3 Mtr. (Recognize), 245.2 Mtr.(Identify)		
43	Image Rotation	180°		
44	Image stabilization	Electronic (EIS)		
45	Defog	Electronic		
46	Day/Night	Auto(ICR)/Colour/B/W		
47	Gain Control	Auto / Manual		
48	Video Format	PAL/NTSC		
49	OSD	Camera Title, Date & Time		
50	Resolution	2MP (1920 x 1080), 1MP (1280 x 720), D1 (704 x 576), CIF (352 x 288)		
51	Frame Rate	Main stream: 2MP/1MP/D1 @(1-25/30 fps) Sub stream 1: 2MP/1MP/D1 @(1-25/30 fps) Sub stream 2:D1/CIF @(1-25/30 fps) Sub stream 3: D1/CIF @(1-25/30 fps)		
52	Bit Rate	H264: 64 kbps-8192 kbps, H265: 25 kbps-6400 kbps		
53	Bit Rate Control	CBR/VBR		
54	Motion detection	Support		
55	ROI	Support		
56	Noise reduction	2D/3D DNR		
57	Two-way Talk	support		
58	Alarm Event	Motion/Tampering detection, audio detection, network disconnection detection, IP conflict detection, memory card state detection, memory space detection		

**Camera Type: Camera Type: 2 MP 45x Network PTZ Camera**  
**Camera Specification:**

**SPECIFY CAMERA MAKE & MODEL NO. ALONG WITH DATA SHEET**

**Make:**

**Model No.**

Sl.No.	Feature	Specification	Compliance (Yes/No)	Remarks
59	IVS (optional)	Tripwire, Intrusion, Object Abandon/ Missing, SMD, Face Detection		
60	Storage	SFTP, NAS, Micro SD card (support max. 512 GB)		
61	Browser	Microsoft Edge and Chrome		
62	SR 332	Quality Level II		
63	Casing	Metal		

## Specification of PoE Switches

**SITC of 10 Ports Switch with 8 Gigabit PoE Ports & 2 Gigabit Uplink Ports, 2 SFP Ports**

**SWITCH MAKE & MODEL NO. ALONG WITH DATA SHEET :**

Make:

Model No.

SL NO	SPECIFICATION		Compliance (YES/NO)	Remarks
1	Uplink Ports	2 x 1000Mbps RJ45 ports + 2 x 1000Mbps SFP ports		
2	Network Standard	IEEE802.3i/802.3u/802.3x/802.3af/802.3ab/ IEEE 802		
3	Switch Capacity	24Gbps Full duplex		
4	Packet Forwarding Rate	1.488Mpps/port		
5	PoE Ports	8, 1000Mbps; RJ45 ports; Max. 30W Output of Single PoE Port		
6	Network Ports	12 port		
7	Transmission Distance	0-100m/1000Mbps or Port 7-8 Max. 250m/10Mbps via Cat.5e or more under Extend mode		
8	MAC Address List	2k		
9	PoE Feature	All ports support MDI/MDI		
10	PoE Standard	IEEE802.3af, IEEE802.3at		
11	PoE watchdog	Supported		
12	PoE Power Supply	1/2(+),3/6(-)		
13	PoE Power Budget	96W		
14	Ethernet Port Light	Green light off: Link is disconnected Green light on: Link is connected Green light flash: Data Transmitting		
15	Surge Protection	Common mode/RJ45 port: 4KV Differential mode/RJ45 port: 2KV Common mode/Power board: 2K Differential mode/Power board: 2KV		
16	Forwarding Mode	Store-and-forward		
17	Power Source	Input: 100-240V AC, 50/60Hz, Bult-in Power Supply		
18	Operating Temperature	-10°C ~50°C		
19	Power Consumption	<5W		
20	LEDs Indicator	Light on: Power On Light off: No Power		
21	Storage Temperature	-40°C ~70°C		
22	ESD	Air discharge: 8KV Contact discharge: 6KV		
23	Humidity	10%-95% , non-condensing		

## Specification of PoE Switches

**SITC of 20 Ports Switch with 16 Gigabit PoE Ports & 2 Gigabit Uplink Ports + 2 SFP Ports**

**SWITCH MAKE & MODEL NO. ALONG WITH DATA SHEET :**

Make:

Model No.

SL NO	SPECIFICATION		Compliance (YES/NO)	Remarks
1	Uplink Ports	2 Uplink Port, 1000Mbps RJ45 ports & 2 Gigabit SFP ports		
2	Switch Capacity	40Gbps Full duplex		
3	Packet Forwarding Rate	29.76Mpps		
4	PoE Ports	16, 10/100/1000Mbps; RJ45 ports; Max. 30W Output of Single PoE Port		
5	Ports	20		
6	Transmission Distance	0-100m/1000Mbps or Port 9-16 Max. 250m/10Mbps via Cat.5e or more under Extend mode		
7	MAC Address List	8K		
8	PoE Feature	All ports support MDI/MDIX		
9	PoE Standard	IEEE802.3af, IEEE802.3at		
10	Packet Buffer	3Mb		
11	PoE watchdog	Support		
12	PoE Power Budget	200W		
13	Surge Protection	Common mode/RJ45 port: 4KV Differential mode/RJ45 port: 2KV Common mode/Power board: 4KV Differential mode/Power board: 2KV		
14	Mode Indicator	Light off: Normal mode		
15	1-20 Indicator (Link & Data)	Green light off: Link is disconnected Green light on: Link is connected Green light flash: Data Transmitting		
16	1-16 Indicator (PoE)	Yellow light off: PoE not powering Yellow light on: PoE powering		
17	PoE Max Indicator	Light off: Indicates PoE power usage is less than 90% Light flash: Indicates PoE power usage 90%≤P≤95% Light on: Indicates PoE power usage 95%<P<100%		
18	PoE Led Button	It is used to switch whether the 1-16 indicator lights indicate the Link/Data status or the PoE status; Default indicates Link/Data status		
19	Extend Switch	OFF: All ports can communicate with each other, the transmission rate is 10/100/1000Mbps adaptive, and the watchdog function is turned off; ON: 9-16 ports can extend the transmission distance of the network cable to Max. 250 meters, the transmission rate becomes 10Mbps, and the watchdog function is turned on;		
20	Network protocol and Standard	IEEE802.3/802.3u/802.3ab/802.3z/802.3x		
21	Forwarding Mode	Store-and-forward		
22	Operating Temperature	-10°C-50°C		
23	Operating Humidity	10%-95% , non-condensing		
24	Storage Temperature	-40°C-70°C		
25	PoE Power Supply	1/2(+),3/6(-)		
26	Power Source	Bult-in Power Supply, Input: 110-240V AC, 50/60Hz		
27	Power Consumption	<5W		
28	PWR	Light on: Powering Light off: No Power		
29	ESD Protection	Air discharge: 8KV, Contact discharge: 6KV		

## Specification of PoE Switches

**SITC of 6 Ports Switch with 4 Gigabit PoE Ports & 2 Gigabit Uplink Ports**

**SWITCH MAKE & MODEL NO. ALONG WITH DATA SHEET :**

**Make:**

**Model No.**

SL NO	SPECIFICATION		Compliance (YES/NO)	Remarks
1	Uplink Ports	2, 1000Mbps; Transmission Distance: 0-100m		
2	Network Standard	IEEE802.3i/802.3u/802.3x/802.3ab		
3	Switch Capacity	12 Gbps Full duplex		
4	Packet Forwarding Rate	1.488Mpps/port		
5	PoE Ports	4, 1000Mbps; RJ45 ports; Max. 30W Output of Single PoE Port Transmission distance:0~100m		
6	Network Ports	6		
7	Transmission Distance	0-100m/100Mbps		
8	MAC Address List	2K		
9	PoE Feature	All ports support MDI/MDIX		
10	PoE Standard	IEEE802.3af, IEEE802.3at		
11	Watchdog	Support		
12	PoE Power Supply	1/2(+), 3/6(-)		
13	PoE Power Budget	48W		
14	Power Source	Built-in Power Supply, Input: 100-240V AC, 50/60Hz		
15	Operating Temperature	-10°C 50°C		
16	Power Consumption	<5W		
17	Power Indicator	Light on: Powering Light off: No Power		
18	Storage Temperature	-40°C~70°C		
19	ESD	Air discharge: 1.5KV Contact discharge: 1.5KV		
20	Humidity	10%-95%, non-condensing		
21	VLAN	Support		
22	VLAN Indicator	Green light on: VLAN mode Light off: normal mode		
23	Port 1-10 indicator	Light off: Link is disconnected Red light on: Powering but data disconnected Light flash quickly: Data Transmitting		
24	Forwarding Mode	Store-and-forward		
25	Anti-Thunder Level	Common mode: 2KV Differential mode: 2KV		

## Specification of 8 TB HDD for NVR Security Camera System

SWITCH MAKE & MODEL NO. ALONG WITH DATA SHEET :

Make:

Model No.

SL NO	SPECIFICATION		Compliance (YES/NO)	Remarks
1	Hard Drive Size	8 TB		
2	Hard Disk Description	Mechanical Hard Disk		
3	Hard Drive Interface	SATA 6 GB/s		
4	Hard Disk Rotational Speed	7200 RPM		
5	Computer Memory Type	DIMM		
6	Recording Technology	CMR		
7	Max. Sustained Transfer Rate OD (MB/s)	235MB/s		
8	Cache (MB)	256		
9	Warranty, Limited (years)	3 Years		
10	Rescue Data Recovery Services	3 Years		
11	Connectivity	USB 3.0		

## SITC OF 32" (80CM) SMART DISPLAY

### DISPLAY MAKE & MODEL NO. ALONG WITH DATA SHEET :

SL NO	Fetures	Specification	Compliance (YES/NO)	Remarks
1	Screen Size (Class)	80 cm		
2	Screen Type	flat		
3	Panel Type	VA		
4	Active Display Size (HxV) (mm)	59.78 cm x 33.63 cm		
5	Brightness (Typical)	250 cd/m <sup>2</sup>		
6	Aspect Ratio	16:09		
7	Contrast Ratio Static	3,000:1(Typ.)		
8	Resolution	Full HD (1,920 x 1,080)		
9	Frame Rate	Max 60Hz		
10	Viewing Angle (H/V)	178°(H)/178°(V)		
11	Eye Saver Mode	Yes		
12	Response Time	4 ms(GTG)		
13	Interface	2 HDMI (1.4), 2 USB-a		
14	Wireless	Built-in		
15	Bluetooth	Built-in		
16	Speaker Output	10w (5w x 2)		
17	Colour	Black		
18	Operating System	Tizen™		
19	Remote Access	Yes		
20	Warranty	3 Years Onsite		

## SITC OF 2U UNLOADED RACK

### RACK MAKE & MODEL NO. ALONG WITH DATA SHEET :

SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Wall Mount 2U x 550 W x 400 D – Bottom Openable with Lock & Key Front Glass Door (Tinted, Toughened) with Lock & Key, 2 pairs of 19" Mounting Rails with U-Marking Welded Side Walls.		

## SITC OF 4U UNLOADED RACK

### RACK MAKE & MODEL NO. ALONG WITH DATA SHEET :

SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Wallmount 4U 550W 400D--Front Glass Door (tinted, Toughened) with Lock & Key 2 pairs of 19" Mounting Rails with U-Marking Welded Side Walls with Metal Engraved D-Link Logo Standard Accessories: 1U Cable Manager (1), Hardware Packet (1Pkt) 3 Socket 5 Amp. Power Distribution Unit (1No)		

SITC OF 6U LOADED RACK			
RACK MAKE & MODEL NO. ALONG WITH DATA SHEET :			
SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Wall Mount 6U x 550 W x 600 D - Grey Color Front Glass Door (tinted, Toughened) with Lock & Key, 2 pairs of 19" Mounting Rails with U-Marking Welded Side Walls with Metal Engraved D-Link Logo Standard Accessories: 1U Cable Manager (1), Hardware Pkt of 20 (1 Pkt) 6 Socket 5 Amp. Power Distribution Unit (1 No) Roof Mounted Fan Unit / 90 CFM /230V AC (1 No)		

SITC OF 600VA UPS (UNINTERUPTED POWER SUPPLY)			
UPS MAKE & MODEL NO. ALONG WITH DATA SHEET :			
SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Capacity 600va/360w Input voltage 230Vac Frequency 50Hz Battery 12v/7.5h X1 Waveform simulated Sine wave Pushbutton switch with auto restart 2 Years Board & Battery warranty onsite Different Led: AC Mode, Battery Mode,Fault Mode Noise Level : Less than 40dB Number of Outlet Plugs 3		

SITC OF CAT6 23AWG CABLE			
CABLE MAKE & MODEL NO. ALONG WITH DATA SHEET :			
SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	CAT6 UTP 23AWG Solid: 305M 23 AWG Solid bare Copper (4 pair) Operating Temperature Range: – 20°C to +75°C Storage Temperature Range: – 0°C to +50°C High Density Polyethylene 2 Insulated conductors twisted together		



SITC OF CAT6 23AWG OUTDOOR CABLE			
CABLE MAKE & MODEL NO. ALONG WITH DATA SHEET :			
SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Conductor:Solid Bare Electrolytic Grade Copper Nominal Conductor Diameter:(23 AWG) Insulation:Polyethylene Color Code:Orange-White with Orange stripe Brown-White with Brown stripe Blue-White with Blue stripe Green-White with Green stripe Pairs separated with a central filler. Inner Jacket: pvc Outer Jacket: PE Color of Jacket:Black BEND RADIUS: 8 X CABLE DIAMETER STORAGE TEMPERATURE: -20°C to 60°C OPERATING TEMPERATURE: -20°C to 60°C		

SITC OF 4 FYBER OPTICAL CABLE			
CABLE MAKE & MODEL NO. ALONG WITH DATA SHEET :			
SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	GOOD QUALITY HDPE HIGH QUALITY GLASS MATERIAL HIGH DATA SIGNAL PASSING CABLE WITH OTDR REPORT Temperature Range:- 10°C to +60°C (Installation) -20°C to +70°C (Operation) -30°C to +70°C (Storage) Fibre Count: 4 No. of Tubes : 1 Tube Dia. (mm) :1.9 ± 0.1 Cable Dia. (mm) :5.8 ± 0.2		

### SITC OF SINGLE FIBRE SFP MODULE PAIR

#### SFP MAKE & MODEL NO. ALONG WITH DATA SHEET :

SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Dual data-rate of 1.25Gbps/1.063Gbps operation 1310nm FP laser and PIN Photo detector for 20km transmission Compliant with SFP MSA and SFF-8472 with duplex LC receptacle Digital Diagnostic Monitoring: Internal Calibration or External Calibration Compatible with SONET OC-24-LR-1 Compatible with RoHS +3.3V single power supply Operating case temperature: Standard: 0 to +70°C		

#### OTHER EQUIPMENTS & INSTALLATION

SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	Installation of all CCTV Cameras along with allied infrastructure by providing all other equipments including Rj45 Connector, Camera Mounting box, pvc Pipe where required, Optical fiber join box, optical patch cord, PTZ mounting kit, electrical point, tie, shade, up wall mounting bracket etc.		

#### 8 PORT MANAGED SWITCH

SL NO	SPECIFICATION	Compliance (YES/NO)	Remarks
1	8 Port Managed Switch (Make - Cisco/Allied Telesis/Mikrotik) Advanced routing protocols (OSPF, BGP, RIP, MPLS), VPN (Virtual Private Network) support, Quality of Service (QoS) and advanced bandwidth management (PCQ), Hotspot		