

6.2.2.56 GTP of 4MP Dome Camera

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		To be mentioned by the bidder	
2	Model		To be mentioned by the bidder	
3	Country of Origin		To be mentioned by the bidder	
4	Country of Manufacture		To be mentioned by the bidder	
5	Features		Should provide min. 4 MP resolution Should support H.265+ compression, Human, Line crossing and intrusion detection Should provide 24 hours colorful image Should support 120 dB WDR technology for clear imaging against strong back light Protection level should be IP67 and IK10	
6	Image Sensor		Should have min. 1/3" Progressive Scan CMOS	
7	Resolution		Should be min. 2560 × 1440	
8	Illumination		Should be able to capture color images in 0.001 Lux using F1.0 lens and AGC, 0 Lux with light	
9	Shutter Time		Should be 1/3 s to 1/100,000 s or better	
10	Lens		Should be Fixed focal lens 2.8 mm with fixed type Iris	
11	Aperture		Should be min. F1.0	
12	Field of view		Should be 96° × 52° × 113° (H × V × D) or better	
13	DORI		System must come with maximum detection range 64 m, observation range 25 m, recognition range 12 m, and identification range 6 m or better.	
14	Supplement Light Type and Range		Should be White Light with min. range of 30M	
15	Compression type		Should support H.265+, H.264+, MJPEG compressions with triple stream as video compression. Should support G.711, G.722.1, G.726, MP2L2, PCM, AAC-LC as audio compression.	
16	Video Stream		Main stream should support min. 2560 × 1440 resolution for both 50Hz @25fps and 60Hz @24fps. Sub Stream should support min. 1280 × 720 resolution for both 50Hz @25fps and 60Hz @30fps. Third Stream should support min. 640 × 360 resolution for both 50Hz and 60Hz.	
17	Video Bit Rate		Should be min. 32 Kbps to 8 Mbps with CBR, VBR Bit Rate Control	
18	Region of Interest		Should have min. one fixed region for main stream	
19	Audio Type		Should support Mono sound with Environment Noise Filtering	
20	Simultaneous Live View		Should be min. 6 channels	
21	Security		Proposed model should support Password protection, HTTPS encryption, EAP-MD5 Authentication, WSSE and digest authentication, RTP/RTSP over HTTPS, Security audit log, TLS 1.2, TLS 1.3, MAC authentication.	

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
22	Protocols		System must support a wide range of protocols, including ICMP, DHCP, DNS, TCP/IP, HTTP, RTP, HTTPS, DDNS, UPnP, RTSP, RTCP, NTP, IGMP, IPv4 & IPv6, UDP, QoS, FTP, SMTP, SNMP and 802.1X	
23	User		Should be min. 32 user	
24	Application programming interface		Should support Profile S, Profile T, Profile G over ONVIF, ISAPI, SDK	
25	Event		Motion detection (human and vehicle), video tampering alarm, exception, Line crossing, region entrance, region exiting & intrusion detection	
26	Linkage		Should have the capability of Uploading to FTP, memory card, send email, notify surveillance center, trigger capture, trigger recording	
27	Interface		System should have min. Microphone, Reset Key and RJ45 interface.	
28	Power		Must support PoE IEEE 802.3af & should not be more than 6.5 Watt.	
29	Material		Camera body must be metal	
30	Temperature		Should support -30° C to 60° C	
31	License		Bidder should provide Video Surveillance Channel Video Management such real-time viewing, Recording, Video search with base surveillance license	
32	Certifications		Must have the following approvals CE-EMC, KC, IC, UL, RCM, CE-LVD, LOA, CE-RoHS, WEEE, IP67, IK10 and bidder should submit the evidence along with the proposal	
33	Installation		Bidder should be responsible for installation, Testing and commissioning with required mounting Kit. Installation work should be completed through OEM certified engineer of the proposed brand. Evidence should be submitted along with proposal.	
34	Documentation		Bidder should provide datasheet and relevant documents as reference of their compliance. Bidder must submit manufacturer authorization letter direct from OEM.	
35	Warranty		Bidder should provide three (03) years full warranty	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.56 GTP of 32-ch NVR

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		To be mentioned by the bidder	
2	Model		To be mentioned by the bidder	
3	Country of Origin		To be mentioned by the bidder	
4	Country of Manufacture		To be mentioned by the bidder	
5	Features		Should have min. 32 channels for IP camera inputs Should have scalable decoding capacity of 2 channels at 32 MP, 2 channels at 8 MP, 10 channels at 8 MP, 20 channels at 4 MP, and 40 channels at 1080p resolution. Must support minimum 320 Mbps incoming and 400 Mbps outgoing bandwidth to ensure smooth video streaming, recording, and remote access. Should have min. 2 x HDMI and 2 x VGA interface System should support 8K output resolution Should support RAID 0, 1, 5, 6, 10 also N+M hot spare The system must feature advanced streaming technology to ensure smooth live viewing even in poor network conditions.	
6	Compression type		Should support H.265+, H.264+ as video compressions Should support G.711ulaw, G.711alaw, G.722, G.726, MP2L2, PCM, AAC as audio compression.	
7	Synchronous playback		Should have min. 16-ch	
8	Network Protocol		Should be TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SMTP, SNMP, NFS, iSCSI, UPnP, HTTP, HTTPS	
9	Interface		Should have min. 2 x RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface, 2 x USB 2.0, 2 x USB 3.0	
10	SATA Interface		Should have min. 16 x SATA, 1 x eSATA with min. 16 TB capacity for each disk	
11	Storage		Bidder should provide required HDD for six Month backup, considering the following parameters: Encoding Mode: H.265 Resolution: 720P(1280x720) Frame Rate(fps): 30 RAID: RAID5	
12	Power		The system must have redundant power supply with back-to-back power cable for C13 power outlet.	
13	Certifications		Must have following certifications: FCC, CE. Must submit the evidence along with the proposal.	

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
14	Installation		Bidder should responsible for installation, Testing and commissioning with required mounting Kit. Installation work should be completed through OEM certified engineer of the proposed brand. Evidence should be submitted along with proposal.	
15	Documentation		Bidder should provide datasheet and relevant documents as reference of their compliance. Bidder must submit manufacturer authorization letter direct from OEM.	
16	Warranty		Bidder should provide three (03) years full warranty	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.57 GTP of Network PoE Switch

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		To be mentioned by the bidder	
2	Model		To be mentioned by the bidder	
3	Brand Origin		To be mentioned by the bidder	
4	Country of Manufacturer/Origin		To be mentioned by the bidder	
5	Interface		10/100/1000 Base-T RJ45 ports: Should be min. 24 1000BASE-X Fiber SFP Ports: Should be min. 4	
6	PoE		Switch should have min. 190 Watt PoE power budget	
7	Upload & Backup		Must have USB port for config file upload/backup & firmware updates	
8	Packet buffer		Should be min. 1.5MB	
9	Processor		Should have min. 800MHz ARM processor	
10	Memory		Should have min. 512MB RAM	
11	Flash		Should have min. 64MB FLASH	
12	MAC Address Table		Should support 16K MAC Address	
13	Bandwidth		Should be min. 56 Gbps	
14	Packet forwarding rate		Should be min. 41.67 Mpps	
15	Jumbo frame support (bytes)		Must support 10K packet size	
16	Mean Time Between Failures (MTBF)		Should be min. 1,750,000 hours	
16	Protocols		Should have PoE controls/Port for remote power management with operation scheduling, Auto DOS (denial of service) prevention, IGMP Snooping and Querier for multicast optimization, Rate limiting and priority queuing for better bandwidth allocation, Port mirroring for network monitoring, SNMP and RMON remote monitoring, Configure in app and email alerts and notifications	
17	Cloud Management		Proposed device should be fully cloud-managed - Instantly activate cloud management from the web GUI - Cloud based network administration - Monitoring - Firmware management	
18	Network Management		Network Management System should allow proposed product to be deployed and managed through this single interface, Should provide Dual firmware images for reliability and uptime of network	
19	Certification		Offered product must have CB, RCM, KC, BSMI, ICES Class A, VCCI, BSMI, UKCA Certifications. Evidence should be submitted along with the proposal.	
20	Documentation		- Bidder should provide relevant documents as reference of their compliance of the specific feature. - Bidder must clearly mention the OEM model number. - Bidder must submit manufacturer authorization letter	

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
			direct from OEM along with bid document. - Bidder must submit Country of Manufacturer certificate along with proposal	
21	Installation		- Bidder should responsible for installation, Testing and commissioning.	
22	Warranty		Bidder should provide three (03) years replacement warranty. If proposed model end of life (EOL), update model need to provide as replacement.	
			Warranty activation should be ready from both website and Moblie Apps. Bidder should provide the activation link and Apps Name during the proposal submission.	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.58 GTP of CAT6 UTP Cable

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		Commscope/Panduit/Prose or equivalent	
2	Model		To be mentioned by the bidder	
3	Brand Origin		To be mentioned by the bidder	
4	Country of Manufacturer/Origin		To be mentioned by the bidder	
5	Conformity		All passive products (Copper and Rack) must be from same manufacturer in order to ensure the end to end proper integration.	
6	Y Construction		Should be 4x2xAWG23	
7	Y Conductor		Should be AWG 23 solid copper	
8	Y Insulation		Should be HDPE	
9	Y Insulation Diameter		Should be 1.02±0.05mm	
10	Y Core		Should be 4 twist pairs	
11	Color Code		Should be White&Blue/Blue,White&Orange/Orange,White&Green/Green,White&Brown/Brown	
12	Y Filling		Should be "+" style	
13	Jacket Material		Should be LSZH	
14	Overall Diameter		Should be 6.2±0.4mm	
15	DC resistance		Should be ≤9.38Ω/100m	
16	Unbalanced resistance		Should be ≤5%	
16	Unbalance capacitance		Should be ≤330pF/100m	
17	Capacitance		Should be ≤5.6nF/100m	
18	Dielectric strength		Should be DC 1KV (3s No Fail)	
19	Insulation resistance		Should be ≥5000MΩ.Km	
20	Impedance (1-250MHz)		Should be 100±15 Ω	
21	Impedance (250-500MHz)		Should be 100±25 Ω	
22	Delay Skew (1-250MHz)		Should be ≤45ns/100m	
23	Delay Skew (250-500MHz)		Should be ≤45ns/100m	
24	Propagation Delay		Should be 536.3ns/100m@250MHz Should be 535.6ns/100m@500MHz	
25	Documentation		- Bidder should provide relevant documents as reference of their compliance of the specific feature.	
			- Bidder must clearly mention the OEM model number.	
			- Bidder must submit manufacturer authorization letter direct from OEM along with bid document.	
26	Installation		- Bidder should responsible for installation, Testing and commissioning.	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.59 GTP of RJ45 Connector

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		Commscope/Panduit/Prose or equivalent	
2	Model		To be mentioned by the bidder	
3	Brand Origin		To be mentioned by the bidder	
4	Country of Manufacturer/Origin		To be mentioned by the bidder	
5	Standard		Should be TIA-568.2-D, ISO 11801	
6	FCC and ANSI compliance		Should Meet ANSI/TIA-1096-A (formerly FCC part 68).	
7	IEC compliance		Should be IEC-60603-7	
8	PoE compliance		Should Support PoE, PoE+ and proposed type 3 and 4 PoE++ applications for up to 100W.	
9	Plug Housing		Should be UL94V-0 rated clear polycarbonate.	
10	Contacts		Should be Gold plated phosphor bronze.	
11	Cable jacket diameter range		Should be 5.7mm-6.4mm	
12	Conductor insulation diameter range		Should be 0.91mm-1.1mm	
13	Documentation		- Bidder should provide relevant documents as reference of their compliance of the specific feature.	
			- Bidder must clearly mention the OEM model number.	
			- Bidder must submit manufacturer authorization letter direct from OEM along with bid document.	
14	Installation		- Bidder should responsible for installation, Testing and commissioning.	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.60 GTP of Access Terminal for Entry

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		To be mentioned by the bidder	
2	Model		To be mentioned by the bidder	
3	Country of Origin		To be mentioned by the bidder	
4	Country of Manufacturer		To be mentioned by the bidder	
5	Installation		Bidder should responsible for installation, commissioning and Testing	
6	Features		Device should have Face, Fingerprint and Card authentication from day one	
			The system should feature a 4.5-inch LCD Capacitive touch screen, a 2-megapixel wide-angle lens camera, and a built-in EM card reading module.	
			The system should support minimum 3000 faces, 3000 cards, and 3000 fingerprints.	
			The system should have minimum 3000 User capacity, 150000 Event capacity.	
			The system should support configuration via a web client interface.	
			The system should support Bluetooth & Wi-Fi	
			The system should support QR code recognition and include face anti-spoofing functionality.	
7	Face recognition distance		0.3 meters to 1.5 meters or higher distance	
8	Duration		Should be less than 0.2 seconds per user with an accuracy rate of at least 99%	
9	Video		The system should support two camera lenses and be compatible with both PAL and NTSC video standards	
10	Audio		The system should support two-way audio via client software, indoor units, and the main control station	
11	Interface		The system should have following interfaces: 2 × alarm inputs, 1 × alarm output, 1 × network interface, 1 × RS-485 port, 1 × Wiegand interface supporting single-direction input, 1 × lock control, 1 × exit button, 1 × door contact input, 1 × tamper input, and 1 × USB port, with PoE support according to the IEEE 802.3at standard.	
12	Card Type and Frequency		The system should support EM card type with a card reading frequency of 125KHz	
13	Power supply		The system should support 12 V DC at 1 A and standard PoE (IEEE 802.3at) for power supply	
14	Operating temperature		Device must be operational -3 °C to 60 °C temperature	
15	Certification		Must have the following approvals CE, CB, UKCA. Bidder should submit the evidence along with the proposal.	
16	Lincense		Bidder should provide base license, Alarm System: Alarm Management license, Access Control: per door license;	
17	Documentation		The proposed brand must have a local office with valid BIDA registration.	
			Bidder must have minimum gold partnership with proposed brand, shall submit supporting documents as evidence.	
			The bidder must have a minimum of three (3) OEM-certified engineers for the specific solution and shall submit supporting documents as evidence.	
			Bidder should provide datasheet and relevant documents as reference of their compliance. Bidder must submit manufacturer	

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
			authorization letter direct from OEM.	
18	Warranty		Bidder should provide three (03) years full warranty	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer

6.2.2.61 GTP of Access Terminal for Exit

(To be filled up and signed by the Manufacturer & Tenderer, otherwise the offer will not be acceptable)

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
1	Brand		To be mentioned by the bidder	
2	Model		To be mentioned by the bidder	
3	Country of Origin		To be mentioned by the bidder	
4	Country of Manufacturer		To be mentioned by the bidder	
5	Features		Device should have Fingerprint, PIN and Card authentication from day one	
			The system should feature a 2.4-inch LCD screen, and a built-in EM card reading module	
			The system should support minimum 5000 cards, 5000 fingerprints and 150,000 events	
			The system should support configuration via a web client interface.	
			The system should support Bluetooth & Wi-Fi	
6	System		The system should operate on Linux, with min. 64 MB ROM, 64 MB RAM, and 640 MHz CPU.	
7	Card reading distance		Should be 0 to 5 cm or higher distance	
8	Duration		Should be less than 1 seconds per user	
9	Fingerprint module		Should be Optical fingerprint module with less than 1 seconds per card recognition	
10	Audio		The system should support audio	
11	Interface		The system should have following interfaces: 1 × RJ-45 network interface (10/100 Mbps, self-adaptive), 1 × lock control, 1 × exit button, 1 × door contact input, 1 × tamper input, 2 × alarm inputs, 1 × alarm output, 1 × RS-485 port, 1 × Wiegand interface (W26/W34), 1 × USB port, and support standard PoE	
12	Card Type and Frequency		The system should support EM card type with a card reading frequency of 125KHz	
13	Power supply		The system should support 12 V DC and standard PoE for power supply	
14	Operating temperature		Device must be operational -3 °C to 60 °C temperature	
15	Electromagnetic Lock and related accessories		Bidder should consider double-door EM locks, compatible power adapter, U/L/Z/ZL brackets for glass doors etc. in the proposal.	
16	Certification		Must have the following approvals CE, CB, UKCA. Bidder should submit the evidence along with the proposal.	
17	Lincese		Bidder should provide base license, Alarm System: Alarm Management license, Access Control: per door license;	
18	Documentation		The proposed brand must have a local office with valid BIDA registration.	
			Bidder must have minimum gold partnership with proposed brand, shall submit supporting documents as evidence.	
			The bidder must have a minimum of three (3) OEM-certified engineers for the specific solution and shall submit supporting documents as evidence.	
			Bidder should provide datasheet and relevant documents as reference of their compliance. Bidder	

Sl. No.	Name of Item	Unit	Required specifications	Full Technical Specification & Standard (to be mentioned)
			must submit manufacturer authorization letter direct from OEM.	
19	Warranty		Bidder should provide three (03) years full warranty	

[The Tenderer should complete all the columns as required]

Signature:

Name & Designation of tenderer

Signature

Name and Designation of Manufacturer

Duly authorised to sign the Tender for and on behalf of the Tenderer