



LIST OF CCTV ITEM FOR TENDER 2023-2024

Si Items

S.No	Name of Items	Detail Specifications & Warranty Period Requirement	Model Quoted by Firm against Specification	Rate
1-	4x2MP Multi-Sensor Panoramic Network IR Bullet Camera	Four 2MP 1/2.8" CMOS image sensor, low illuminance, high image definition Outputs max. 8MP (4096 × 1800) @30 fps H.265 codec, high compression rate, ultra-low bit rate ROM, 4 GB RAM 2 GB Built-in IR LED, max. IR distance: 30 m ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments DWDR, 3D NR, HLC, BLC, digital watermarking Intelligent functions: Crowd distribution map, Vehicle Density situation Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection Alarm: 2 in, 2 out; audio: 1 in, 1 out; 485; BNC; supports max. 256 G SD card 12V DC/24V AC/Poe power supply; easy for installation Supports object tracking IP67, IK10 protection One Year Warranty period.		
2-	8 MP Full-color Active Deterrence Network Camera	8 MP, CMOS image sensor, low illuminance, high image definition, Outputs max. 8MP (3840 × 2160) @25/30 fps, H.265 codec, high compression rate, low bit rate, Built-in warm illuminator, and the min. illumination distance: 30m, ROI, SMART H.264+/H.265+, flexible coding, applicable to various band width and storage environments, Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes, Intelligent detection: Tripwire, intrusion, Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection, Supports sound and light alarm linkage. When an alarm is triggered, the camera links sound alarm and light flashing Supports one-tap disarming.		

		You can disarm the events of alarm output, sending email, audio, and light in the configured period, Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card, built-in Mic and speaker, 12V DC/Poe power supply, IP67 protection, SMD Plus, Colorful flashlight alarm. One Year Warranty period.		
3-	2MP Network AI IR Bullet Camera	Max. 2MP resolution, Up to 120fps, 0.007Lux@F1.3, 1/30sec. (Color), 0Lux (B/W, IR LED on), Day & Night (ICR), WDR (120dB), H.265, H.264, MJPEG, Video Analytics based on AI, Object detection and classification (Person, Face, Vehicle, License Plate), Face mask detection, Social distancing detection, Attribute, Best Shot, Compatible Insight v2.0 for Business Intelligence, Age/gender based People counting, Heat map, Queue management, TPM with FIPS 140-2 level2, Secure boot, Verify firmware forgery, System requirements, IP66, IP67, IK10, NEMA4X. One Year Warranty period.		
4-	Providing and fixing of 4 MP Intelligence base Cameras with Built in mic.	4MP, CMOS image sensor, low illuminance, high image definition, Outputs max. 4MP (2688 × 1520)@30fps, H.265 codec, high compression rate, low bit rate, Built-in IR LED, max. IR distance: 50 m, ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments, Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes, Intelligent detection: Intrusion, tripwire, Abnormality detection: Motion detection, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection, Supports max. 256 G Micro SD card, built-in Mic, 12V DC/POE power supply, IP67 protection. One Year Warranty period.		 
5-	Outdoor/ Indoor AI Intelligent Cameras,	4Megapixel progressive scan CMOS H.265 & H.264 triple-stream encoding, 25/30 fps@2688 × 1520, 50/60 fps@1080P(1920 × 1080) WDR (140 dB), RAM 1 GB , AI and Intelligent Smart Features, Support face image capture, Support 6 kinds of face attributes extraction: Age, Gender, Expression (Jolly, Surprise, Normal, Rage, Sad, Disgusted, Confused, Frightened), Glasses, Mouth Mask, Moustache & Beard, Tripwire, intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking		

		<p>detection and people gathering, Support People Counting, Perimeter Protection, Support Line crossing/Region/Queuing people counting; Support 4 accesses independent detection, 4 areas independent detection, Object Abandoned/Missing, Heat Map, 2.7 mm–12.0 mm motorized lens, 2/1 Alarm in/out, 1/1 audio in/out Max. IR LEDs Length 50 m, Micro SD memory, IP67, IK10.</p> <p>One Year Warranty period.</p>		
6-	Artificial Intelligence base Facial Reorganization Camera.	<p>4MP, CMOS image sensor, low luminance, high image definition, 4MP (2688×1520) @50 fps/60 fps, ROM , 16 GB RAM 2 GB, H.264&H.265 coding, high compression ratio, Alarm: 3 in, 2 out; audio: 1 in, 1 out; RS-485; BNC; supports max. 256 GB SD card, Five streams for three-channel HD video, IP67, IK10 protection grade, 5 streams, Face Recognition, with deep learning algorithm support People Counting, Face Capture, Perimeter Protection and Video Structuration, Professional, intelligent, Face recognition, track, priority, snapshot, face enhancement, face exposure, face attribute extract, 6 attributes and 8 expressions: Gender, age, glasses, expressions (anger, sadness, disgust, fear, surprise, calm, happiness and confusion), mask, beard, Max supports face contrast in face library with 200,000 faces, People Counting, People counting (count the entry number, exit number and pass number), display and output daily/monthly/annual statistics, No. in area, 2.7 to 12mm Motorized Lens, 12V DC/24V AC/, IR Distance Minimum 50m , IP67, IK10 protection grade.</p> <p>One Year Warranty period.</p>		
7-	Artificial Intelligence License Plate 4 MP Speed Detection Cameras with installation Accessories	<p>4 MP Artificial Intelligence ANPR Camera, white light, Embedded with Deep learning LPR Engine, Supports vehicle video detection with high detection rate; supports vehicle direction detection, License plate recognition, vehicle size, vehicle color detection and etc., Supports 11 vehicle sizes detection: large bus, heavy truck, medium truck, sedan, minivan, light truck, SUV, MPV, medium bus, pick-up and minicar, Supports 11 colors detection (daytime): white, black, blue, red, yellow, green, pinkish purple, gray, brown, orange and silver. White List (10000 records database inside the camera), H.265& H.264 dual-stream encoding, Micro SD memory, Powerful motorized lens and white light, ideal</p>		

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		for monitor ANPR distance, IP67, and superior performance for outdoor applications, Embedded with LPR algorithm inside the camera, Vehicle data structuring: license plate recognition, vehicle size, vehicle color detection and etc. Illumination Distance 30 m (98.43 ft), Capture Distance, 8 m–30 m, Min. Illumination, 0.002 lx (built-in illuminator on), Min. Detection Speed 60 km/h, Alarm Event, Vehicle Detection, Vehicle capture rate ≥ 99%, Vehicle Recognition. One Year Warranty period.		
8-	Mini PTZ Speed Dome Cameras for Outdoor Surveillance.	2MP, 25/30fps@2M, Deep-learning, Pro AI performance: Perimeter protection, Video Structurization, 25x optical zoom, SMD, Starlight, H.265, PFA Technology, IR Distance up to 100m, -40°C~70°C wide temperature range, IP66, POE+, -15°~90° tilt range. One Year Warranty period.		
9-	PTZ Speed Dome Cameras for Outdoor Surveillance.	4Megapixel 45x optical zoom, Max. 25/30fps@4MP, Deep-learning-based auto tracking and perimeter protection, IR distance up to 250m, IP67, IK10, Operating Temperature: -40°C~+70°C, Smart detection / Video Analytics:, Support human, motor vehicle and non-motor vehicle image capture, Support alarm triggering by target types (human And vehicle), Filtering out false alarms caused by animals, rustling leaves, bright lights, etc., Support Auto Tracking, Tripwire, Intrusion, Object missing, Object Abandoned, Face Detection etc. One Year Warranty period.		
10-	Supply of 64 Channel Artifice Intelligence Enabled NVR	64 Channel AI NVR, Smart H.265+/H.265/Smart H.264+/H.264/MJPEG, up to 16 Channel perimeter protection, up to 4 Channel video stream face recognition, Up to 24 face pictures /sec processing, up to 20 face databases with 100,000 face images in total, 2 HDMI, 1 VGA Output Ports, Support Multiscreen Display 16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, Smart H.265+/H.265/Smart H.264+/H.264/MJPEG 320 Mbps Bandwidth 8 SATA III Ports, Up to 8 TB capacity for each HDD ,2 RJ-45 Ports (10/100/1000Mbps). One Year Warranty period.		
11-	Embedded Video Storage	bit High-performance multi-core processor, Max 512-ch IP camera inputs, Max 1024 Mbps incoming/recording/forwarding bandwidth, 48 HDDs, SAS/SATA, Hot-Swap, Supports RAID 0/1/5/6/10/50/60, JBOD, Hot spare, Supports		

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		<p>video stream/ Picture direct storage mode and IPSAN storage mode, Supports N+M cluster, Supports Automatic Network Replenishment (ANR), SAS cascade for expanded storage space, Modular and drawer-like design, 1+1 redundant 80PLUS platinum power supply, BBU battery for abnormal power failure, 10Gig. Fiber Module. RAM 8 GB by default (extendable to 64 GB), Power Redundancy1+1, 4x1-GbE LAN ports; 2x10-GbE optical fiber ports, up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback, Video Direct Storage (ONVIF).</p> <p>One Year Warranty period.</p>		
12-	Embedded Video Storage	<p>64-bit High-performance multi-core processor, Max 512-ch IP camera inputs, Max 1024 Mbps incoming/recording/forwarding bandwidth, 24 HDDs, SAS/SATA, Hot-Swap, Supports RAID 0/1/5/6/10/50/60, JBOD, Hot spare, Supports video stream/ Picture direct storage mode and IPSAN storage mode, Supports N+M cluster, Supports Automatic Network Replenishment (ANR), SAS cascade for expanded storage space, Modular and drawer-like design, 1+1 redundant 80PLUS platinum power supply, BBU battery for abnormal power failure, 10Gig Fiber Module. RAM 8 GB by default (extendable to 64 GB), Power Redundancy1+1, 4x1-GbE LAN ports; 2x10-GbE optical fiber ports, Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback, Video Direct Storage (ONVIF).</p> <p>One Year Warranty period.</p>		
13-	Central Management Server.	<p>Main Processor Intel i5, 64 bits 4 Core Processor, Operating System Embedded Linux with 8GB memory, Supports 3.5"chassis with up to 15 hot plug hard drives and extend the storage via iSCSI and SAS/SATA disk intermixing to use, 4 Ethernet Ports (100/1000Mbps) and 3HDMI out ports with GPU decoding, System should be capable to Face recognition cameras Per Server without license, System must be capable to add Face library management, Adding face one by one, Import faces in batches., Automatically captures faces in the camera field of view Extracts face attribute information from captured face, Real-time face comparison, Generate daily, weekly, monthly attribute report based on the gender and age, Bandwidth of Video Input/output per Server 600 Mbps., Storage Environment</p>		

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		Temperature -20℃ ~ + 70℃, Redundant Power Supply, Embedded device, 7*24 stable operation, Support local storage and IP-SAN storage, Support Google map, Raster Map, Support ONVIF standard protocol, Support platform SDK, Front panel can displays system service status, Support 1000 channels (Support 450 input devices), Support 150 online users, unlimited user management, Support 650M transfer capability, Support 650M local storage capability, Support POS function, Support People counting, Support Heat map, Support Face Recognition, Support ANPR. One Year Warranty period.		
14-	Recording Storage Device	Recording Storage Surveillance Grade 8 TB One Year Warranty period.		
15-	Video Wall Display Unit Ultra Narrow Bezel	SMART Signage Razor Narrow Bezel Video Wall. Razor-thin bezel measuring 0.44mm, 0.88mm Bezel-Bezel Depth for seamless image Wide viewing angles enable clear image presentation for more viewers in large spaces 700 nit brightness and non-glare panel provide high visibility 24/7 Picture enhancement technology delivers optimized visuals Input: RGB, Video, HDCP, USB Resolution: 1920*1080 Type: IPS Response Time: 8ms Max Brightness: 700nit Contrast Ratio: 1100:1 Power: 270 W/LED with 2x LEDs/PDU. One Year Warranty period.		
16-	Industrial Grade 4K Screen for 24/7 Monitoring.	55"(16: 9) UHD LED monitor, Built-in Android system, LED backlight, 3840×2160, 350cd/m2, 1200: 1 static contrast, 178/178 view angle, 8ms response time, 1.07B/10bit display color, 2×HDMI/USB 3.0/USB 2.0/Audio inputs, headphone Jack, RJ45 output, 2×8W speakers, 1231.6×707.7×62.5mm, 13.5kg. One Year Warranty period.		
17-	Industrial Grade 4K Screen for 24/7 Monitoring.	21.45" FHD Monitor, 1920×1080 (FHD), VGA×1, HDMI×1, 3000:1 Contrast Ratio. One Year Warranty period.	1	
18-	Ultra-HD Network Video	Standard 2.5U case, elegant appearance, Plug-in board design, easy to use and maintain, H.265+/ H.265/ H.264/ MPEG4/ MPEG2/ MJPEG video		

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	Decoder	decoding, Ultra-high decoding ability, up to 32 Megapixels, 2ch HDMI and 2ch DVI-I input, supports 4K collection, Supports 1/4/6/8/9/16/25/36 and free split, Supports alarm, RS232, RS48, Splicing screens control for zoom/merge/roam/overlay, Supports redundant power, stable and reliable, 12ch@12M/12ch@4K ,20CH@500M/48ch@1080P,108CH@720P/192ch@D1 decoding, 12×HDMI outputs, 2×HDMI/2×DVI-I inputs. One Year Warranty period.		
19-	Multi-Screen Controller	Multi-screen Video Controller ,ATCA industry box, 10 service card slots, every slot supports various service card, Redundant power optional and smart temperature controlled fan, FPGA array framework, built in ultrahigh bandwidth switch matrix, high image processing capacity, flexible data exchange, PCI-E bus, high system bandwidth, Window Division Supports 1/4/9/16 window division modes and full-screen switch of the window ,Input support Up to 8 kinds of signal sources are supported, including VGA, DVI, HDMI, BNC, SDI, and IP camera input ,Power supply Redundant (1+1), Hot Swappable . Output with decoding card, Input with 4k Card complete in all aspects. One Year Warranty period.		
20-	Video Input Interface Cards	Interface card A should have 2 CH HDMI 1.4 input slot support HDCP, Both HDMI input channel should support 4K resolution, Input Access Capability: All HDMI Channel Should support following resolution 3840*2160@30fps,1920*1080@60fps/1600*1200@60fps/1400*1050@60fps/1366*768@60fps/1280*1024@60fps/1280*720@60fps/1024*768@60fps, Capable of frequent switching of channels. Cards should work with different type of video convertors and splitters. One Year Warranty period.		
21-	Video Input Interface Cards	Interface 4ch BNC, Signal Format 3G-SDI, 2.97Gbps Access Capability 4ch@1080P, downward, Compatibility. One Year Warranty period.		
22-	Video Output Decoding Interface Cards	1: Video Output Interface A should be capable of decoding network stream and displaying at least 4 CH in 4k resolution with 25fps per card 2: Should be capable of decoding at least 2 CH per card at 12 MP with local input in 15fps 3: Should support 4ch HDMI 1.4 output,		

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		<p>supportive to distance at 20m</p> <p>4: Interface card should support Following output resolutions 3840*2160@30fps (HDMI2, 3)/1920*1080@60fps/1600*1200@60fps/1400*1050@60fps/1366*768@60fps/1280*1024@60fps/1280*720@60fps/1024*768@60fps</p> <p>5: Each decoding card Should support up to 32 splits on video wall, Supportive to Multi-input displaying at one time.</p> <p>6: Card should support H.265 video compression standard for logs and event storage.</p> <p>One Year Warranty period.</p>		
23-	Base for Screens.	Aluminum Good Quality Base, for Each Screen. One Year Warranty period.		
24-	Bracket for Screens.	Aluminum Good Quality Back Bracket, for Each Screen. One Year Warranty period.		
25-	PC for Cameras Monitoring and Management	Intel ® 11th Generation Core i7- Processor 12MB Cache or Better • 4GB Dedicated Nvidia Graphic Card or Better • 8GB DDR4 RAM • 1TB HDD • Intel Gigabit Ethernet, Keyboard, Mouse. One Year Warranty period.		
26-	24 Port Gigabit High-performance Ethernet Switches Layer 3 for Main Control Room.	High Performance Gigabit Control Room Switch, High Scalability, High Availability, 24 x 100/1000Base-X optical port, (8 x Combo port), 4 x 10G BASE-X SFP+ optical port, 256 Gbit/s Switching Capacity, Packet forwarding rate 96Mpps, VLAN, Link Aggregation, IP Routing, Ring Supported, High End Security & Management Features, IRF2, Complete Security Control Policies, Diversified QoS Policies, Environment Friendliness and Energy Saving. One Year Warranty period.		
27-	16 Port Gigabit POE Switch.	Fast/Gigabit Ethernet, 16GE Poe, Poe SFP Slots, 2GE SFP, Switching Capacity, 52Gbps, Packet Forwarding Rate, 23.81MppPacket Buffer Memory, 4Mb MAC Table Size, 8K PoE Standard, PoE (802.3af), PoE+ (802.3at), Hi-PoE, PoE Budget, 240W Long PoE Transmission, Support of VLAN, Link Aggregation, Flow Control, Spanning Tree, Management Web, Lightning Protection, Mode 2KV, Working Temperature -10°C~55°C. One Year Warranty period.		
28-	08 Port Industrial Grade POE Network Managed	8 Ports Industrial Full Gigabit Poe Managed Switch Provide 8* 10/100/1000Base-T Ethernet ports (Poe) + 2* 1000BASE-X SFP Ports, Support 4K high-definition video transmission; PoE Function: support IEEE802.3af/at standard, each		

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	Gigabit Switch with 2 SFP Ports including Power supply	port supports up to 60W PoE Output; Support Web-based network management, support VLAN, QoS, RSTP, SNMP, Support IGMP Snooping etc. network function; Support 4K VLAN, Support 802.1Q Protocol-Based VLAN, Support Port-Based VLAN; Support Fast Ring as redundant link Support relay alarm for power off, network broken, PoE off, 6KV surge immunity, 8KV ESD Protection and anti-interference ability; -40~75 working temperature Support redundant Power Supply Rail/Rack kit Fitting, CE、FCC、ROHS Certified. One Year Warranty period.		
29-	HD Network Control Keyboard for PTZ Cameras.	HD Network Control Keyboard, Screen 10" TFT LCD touch screen, Keyboard to Control, 2×RJ-45 port (10/100/1000M), Four-Dimensional Joystick Control of PTZ Functions, Support 4K decoding live view, Support Video-Wall display control, support bidirectional talk, Preset Position, Auto Scan, Auto Pan, Auto Tour & Pattern Control. One Year Warranty period.		
30-	CAT-6 Network Cable in RFT	CAT-6 Network Cable in Good Quality Duct / U-PVC, / Conduit including the RJ-45 Connectors including Civil related work if required. Support Poe long-distance transmission; Excellent OFC with 99.99% OFC (oxygen free copper) purity; Environmentally-friendly outer sheath; Top-notch quality guarantee for 10 years. One Year Warranty period.		
31-	Optical fiber cable in RFT	12 core optical fiber cable in Good Quality Duct / U-PVC, / Conduit including Splicing, Patch Cord, Pigtail and Related installation accessories. One Year Warranty period.		
32-	FIFER PATCH CARD	FIBER PATCH CARD SC TO SC One Year Warranty period.		
33-	FIFER PATCH CARD	FIBER PATCH CARD SC TO LC One Year Warranty period.		
34-	PDU	PDU One Year Warranty period.		
35-	OFDF	OFDF 24 Port with accessories of OFC related. One Year Warranty period.		
36-	OFDF	OFDF 12 Port with accessories of OFC related. One Year Warranty period.		
37-	SFP	Gigabit SFP Fiber Module. One Year Warranty period.		
38-	IT Rack 42U	Floor Standing, Perforated Dual Compartment Door, 2 Fixed Tray and 1 sliding tray, 4 Fans, Fan kit and PDU, Compatible to cater all accessories as per the CCTV design.		

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		One Year Warranty period.		
39-	Weather Proof Rack	Weather Proof Rack/ Edge DB Box to inbuilt, Poe switch, UPS, Circuit Breaker, PDU, ODF etc. One Year Warranty period.		
40-	Power Cable in RFT	2.5 mm 2 Core Power Cable in Feet including Civil work pure copper above than 99%. One Year Warranty period.		
41-	Power Backup	ONLINE Branded 10 kVA, 0.9 PF standard Backup UPS. One Year Warranty period.		
42-	Power Backup	1 kVA, 0.6 PF standard Backup. One Year Warranty period.		
43-	Breaker	10 Amp Breaker for DBs. One Year Warranty period.		
44-	Poles	Galvanized Poles for Cameras 5 Feet with, Base, Civil Work complete in all aspects. One Year Warranty period.		
45-	Poles	Galvanized Poles for Cameras 10~15 Feet with, Base, Civil Work complete in all aspects. One Year Warranty period.		
46-	Poles	Galvanized Poles for Cameras 15~20 Feet with, Base, Civil Work complete in all aspects. One Year Warranty period.		
47-	Water-proof Junction Box for Camera Mount	Aesthetic design, Material: aluminum, junction box. One Year Warranty period.		
48-	HDMI Cable	HDMI Cable 15 Meter 4K Supportive. One Year Warranty period.		
49-	Main Control Room Installation	Main Control Room with installation of LED and other related Accessories. Room Size Wood /PVC Paneling. Gypsum State of the art Ceiling 2X2. Electrification work with lighting and related work. Chairs and Counter Table Screen structuring		
50-	Digging and Road Cutting in RF	Lying of OFC, UTP Cable, lying of warning tape, backfilling, Installation of route indicators.		
51-	Installation / Commissioning	Relevant Installation / Commissioning Configuration Services for quoted equipment / store.		

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