

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخدمة الدمج العمليتي
ومحيط مجموعة الملك عبدالله الثاني القوات الخاصة الملكية
المواصفات الفنية للبند الاول

#	item	Description	QTY
1-	Thermal smart linkage tracking solution	● Click Linkage: One-Touch connection between bi-spectrum bullet camera and PTZ camera beforehand via VMS client ● Tracking Mode: Manual/Auto ● Manual Tracking: Drawing an area in VMS client within the field of the bullet camera, leading the PTZ camera zooming in ● Multi-Targets Tracking: Up to 30 targets simultaneously ● Event Tracking: Intrusion Detection, Line Crossing Detection ● Tracking Duration: Configurable in VMS client for PTZ tracking ● Temperature Range: - 20 °C to 150 °C (- 4 °F to 302 °F) ● Fire Detection: Dynamic fire detection, up to 10 fire points detectable. ● <u>Bullet Camera- Thermal:</u> ● Image Sensor: Vanadium Oxide Uncooled Focal Plane Arrays ● Resolution: 384 × 288 ● Pixel Pitch: 17 μm ● Spectral Range: 8 μm to 14 μm ● Focal Length: 35 mm ● Digital Zoom: ×2, ×4, ×8 ● <u>Bullet Camera- Optical Module:</u> ● Image Sensor: 1/2.7" Progressive Scan CMOS ● Resolution: 2688 × 1520, 4 MP ● Min. Illumination: Color: 0.0089 Lux/ B/W: 0.0018 Lux ● Focal Length: 14.8 mm ● WDR: 120 dB ● Video Compression: Main Stream: H.265/H.264, Sub-Stream: H.265/H.264/MJPEG ● Communication Interface: 1, RJ45 10 M/100 M self-adaptive Ethernet interface.1, RS-485 interface ● <u>Optical Speed Dome:</u> ● Image Sensor: 1/1.8" Progressive Scan CMOS ● Min. Illumination: Color: 0.002 Lux/ B/W: 0.0002 Lux / 0 Lux with IR ● Resolution: 2688 × 1520 ● Focal Length: 6.0 - 252 mm, 42 × optical zoom ● Digital Zoom: 16 x ● Working Distance: 100 mm to 1500 mm (Wide-Tele) ● WDR: 140 dB ● Image Enhancement: 3D DNR, EIS, HLC/BLC, SVC ● White Balance: Auto/Manual/ATW (Auto-tracking White Balance)/Indoor/Outdoor/Daylight Lamp/Sodium Lamp ● IR Supplement: Up to 500 m ● Optical Defog: Yes ● 3 streams ● Video Compression: Main Stream: H.265+/H.265/H.264+/H.264, Sub-Stream: H.265/H.264/MJPEG, Third Stream: H.265/H.264/MJPEG ● Alarm Action: Preset, Patrol Scan, Pattern Scan, Memory Card Video Record, Trigger Recording, Notify Surveillance Center, Upload to FTP/Memory Card/NAS, Send Email ● Protocols: IPv4/IPv6, HTTP, HTTPS, 802.1x, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTCP, RTP, TCP, UDP, IGMP, ICMP, DHCP, SSL/TLS, PPPoE	26

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		• Network Storage: MicroSD/SDHC/SDXC card (up to 256 G) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR). • Security: User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x(EAP-MD5, EAP-TLS), access control, IP address filtering.	
2-	Fixed Outdoor camera	• 1/1.8" Progressive Scan CMOS • Max. Resolution : 2688 × 1520 • Min. Illumination : Color: 0.00 ° Lux • Aperture : fixed lens 2.8 MM • Focus : Auto • White light Range : 60 Meter • Smart light : yes • Video Compression :Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG ,Third stream: H.265/H.264 • Wide Dynamic Range (WDR) :130 dB • Image Enhancement: BLC, HLC, Defog, 3D DNR • Basic Event: Motion detection, video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal reboot, HDD full, HDD error), video quality diagnosis, vibration detection • Security : Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS • Smart Event : Line crossing detection, intrusion detection, region entrance detection, region exiting detection • Linkage : Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning • Perimeter Protection : Tripwire ,Line crossing, intrusion, region entrance, region exiting, supports human and vehicles targets classification • Face capture • Linkage : • Power Source: PoE 802.3at • Onvif • IP67,Ik10	69
3-	PTZ camera	• Image Sensor: 1/1.8 progressive scan CMOS • Max. Resolution : resolution 4 MP (2560 × 1440) • Min. Illumination : Color: 0.005 Lux @ (F1.5, AGC ON), B/W: 0.001 Lux@(F1.5, AGC ON), 0 Lux with IR • Zoom : 32x optical, 16x digital • Focal Length : 5.9 mm to 188.8 mm • Focus : Auto, semi-auto, manual, rapid focus • IR Distance: up to 200 m • Movement Range (Pan) : 360° • Movement Range (Tilt) : -15° to 90° (auto flip) • Presets : 300 minimum. • Park Action : Preset, pattern scan, auto scan, tilt scan, random scan, frame scan, panorama scan • IR Range : up to 200 Meter • Video Main Stream : 25 fps (2560 × 1440, 1920 × 1080, 1280 × 960, 1280 × 720) • Video Sub-Stream : 25 fps (704 × 576, 640 × 480, 352 × 288) • Video Third Stream : 25 fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288) • Video Compression :Main stream: H.265+/H.265/H.264+/H.264,Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264 • Wide Dynamic Range (WDR) : 120 dB • Image Enhancement : BLC, HLC, Defog, 3D DNR	8

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		• Basic Event: Motion detection, video tampering alarm, exception, alarm input and output • Smart Event : Line crossing detection, intrusion detection, region entrance detection, region exiting detection, unattended baggage detection, object removal detection, audio exception detection. • Perimeter Protection : line crossing , intrusion , region entrance , region entrance, region exiting Support alarm triggering by specified target types (human and vehicle • Security : Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS • Linkage : Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning • Power Source: PoE 802.3at • Onvif	
4-	ANPR camera	• Image Sensor: 1/1.8" Progressive Scan CMOS • Max. Resolution: 1920 × 1080. • Min. Illumination: Color: 0.0005 Lux @ (F1.2, AGC ON); B/W: 0.0001 Lux @ (F1.2, AGC ON), 0 Lux with IR • Focal Length: 2.8 to 12 mm • Focus: Auto, Semi-auto, Manual • Iris Type: P-iris • Supplement Light Range: 2.8 to 12 mm: 50 m • 5 streams • Video Compression: Main stream: H.265+/H.265/H.264+/H.264, Sub-stream: H.265/H.264/MJPEG, Third stream: H.265/H.264, Fourth stream: H.265/H.264/MJPEG, Fifth stream: H.265/H.264/MJPEG • Region Of Interest (ROI): 4 fixed regions for each stream • Target Cropping: yes • Protocols : TCP/IP, ICMP, HTTP, HTTPS, FTP, SFTP, SRTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour, SSL/TLS, WebSocket, Web Sockets. • Security: Password protection, complicated password, HTTPS encryption, 802.1X authentication (EAP-TLS, EAP-LEAP, EAP-MD5), watermark, IP address filter, basic and digest authentication for HTTP/HTTPS, WSSE and digest authentication for Open Network Video Interface, RTP/RTSP OVER HTTPS, Control Timeout Settings, Security Audit Log, TLS 1.2, TLS 1.3, TPM 2.0. • WDR :140 db • Image Enhancement: BLC,HLC,3D DNR, Distortion Correction, Defog • Image Stabilization: EIS • Built-in memory card slot, support microSD/microSDHC/microSDXC card, up to 1 TB • Reset Key • Basic Event: Motion detection (support alarm triggering by specified target types (human and vehicle)), video tampering alarm, exception (network disconnected, IP address conflict, illegal login, abnormal restart, HDD full, HDD error), video quality diagnosis, vibration detection • Smart Event: scene change detection ,audio exception detection ,defocus detection	2

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		• Linkage: Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger alarm output, trigger recording, trigger capture, audible warning • Perimeter Protection: Line crossing, intrusion, region entrance, region exiting Support alarm triggering by specified target types (human and vehicle) • Road Traffic and Vehicle: Block list and allow list: up to 10,000 records • Detection: Support license plate recognition of motorcycles (only in checkpoint scenario) Support vehicle attribute detection, including vehicle type, color, brand, etc. (City Street mode is recommended.) • Protection : IP67 ,IK10 • POE: IEEE 802.3at, Type 2, Class 4, 42.5 V to 57 V, 0.396 A to 0.295 A, max. 16.8 W • Material: Aluminum alloy body • base licenses for 2 ANPR cameras	
5-	ANPR-BASE ANPR LICENSE		1
6-	Decoder	• 4K Decoder • Up to 4K (3840 × 2160@30Hz) via HDMI output interfaces (only for odd interface) • Up to 8-ch decoding at 24 MP resolution • H.265+/H.265, H.264+/H.264, Hik264, MPEG4 and MJPEG video compression. • Three encoding levels: baseline, main, and high-profile. • Two decoding modes: active decoding and passive decoding. • Supports two-way audio via client software. • Provides VGA and DVI input interfaces. • Input Resolution: VGA, DVI-I: 1080p: 1920 × 1080@50/60 Hz, 720p: 1280 × 720@50 Hz/60 Hz • Output :HDMI × 16, BNC × 8 (DB15 × 2)	1

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		• Output Resolution: HDMI: 4K: 3840 × 2160@30 Hz (for odd interface only) , 1080p: 1920 × 1080@50/60 Hz, 720p: 1280 × 720@50 Hz/60 Hz BNC: PAL: 704 × 576, NTSC: 704 × 480 • Supports window opening, window roaming and window split. • Supports multi-screen control with PC installed with RSC server • Gets stream and decodes via URL and RTSP from encoding devices • Displays the decoded video stream on the video wall by directly linking cameras or by stream media forwarding. • Regular and irregular virtual screen configurable to display multiple signal sources and get rid of the restriction of physical screen. • Accessible by thermal network camera and you can view the temperature measurement, dynamic fire source detection, ship detection and VCA information in live view and playback. • You can enable or disable the smart information for the thermal network camera. • Port aggregation technology (Ethernet Channel). • Accessible by 2.4 MP Deepin View camera • You can configure what the video wall shows when decoding ends and streaming fails via the Web browser and client software. Network Interface: RJ45 interface × 2, 10/100/1000 Mbps adaptive, Optic interface × 2, 100 base-FX/1000 base-X ,An RJ45 interface and an optic interface form a combo. • Alarm In: 8 • Alarm Out : 8 • Power Supply: 100 to 240 VAC • Decoding Resolution: Up to 24MP (only for 3 encoder tracks mode)	
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		• Decoding Channel: 128-ch • Decoding Capability: 24MP@30fps: 8-ch,12MP@20fps:16-ch,8MP@30fps: 32-ch,5MP@30fps: 48-ch,3MP@30fps: 80-ch,1080p@30fps/3 Mbps: 128-ch • Split Screen: 1/4/6/8/9/12/16/25/36	
7-	Monitor 50	• Designed for surveillance, high reliability and stability • 50" LED backlight 4K resolution • Multiple inputs: HDMI, VGA, USB	4
8-	SURVEILLANCE Professional server	• Custom window division configurable • Viewing maps and real-time events during live view and playback • Stream type self-adaptive, transcoded playback, and frame- extracting playback. • Fisheye dewarping of multi-channel • Controlling PTZ in visualization way • Supports decoding stream from cameras with high-definition • Recording schedule for continuous recording, event recording and command recording • Storing videos on encoding devices, Hybrid SANs, cloud storage servers • Providing main storage and auxiliary storage • Providing video copy-back • Storing alarm pictures on NVRs, Hybrid SANs, cloud storage servers • Supports search of VCA event related videos, video footages, and event triggered video footages. • Camera linkage, alarm pop-up window and multiple linkage actions • Multiple events for video security, access control, resource group, resource maintenance, etc. • Supports adding combined alarms in a visualization way • Managing network transmission devices such as switches, displaying the network connection and hierarchical relationship of the managed resources by a topology • Viewing the network details between the device nodes in the topology, such as downstream and upstream rate, port information, etc. and checking the connection path • Exporting the topology and abnormal data to check the device connection status and health status • Cameras: 300 • Alarm Inputs/output :300/300 • Areas:300 • Cameras Per Area:64 • Alarm Inputs/output Per Area : 64/64 • Recording Schedule:3000 • Recording Schedule Template:200 • Event And Alarm Rules:3000 • Storage Of Events Or Alarms Without Pictures :100/s • Events Or Alarms Sent To Clients *The Clients Include Control Clients And Mobile Clients: 120/s, 100Clients/s • Picture Storage (Including Event/Alarm Pictures, Face Pictures, And Vehicle Pictures) :20/s (Stored in SYS Server),80/s (Stored in Recording Server) • Regular Report Rules:100 • Event Or Alarm Rules In One Event/Alarm Report Rule :32 • Records In One Sent Report :10,000 or 10 MB • Resources Selected In One Report :20 • Concurrent Accesses Via Web Clients And Control Clients :100 • Concurrent Accesses Via Mobile Clients:100 • Users:3000 • Roles:3000 • CPU :Intel® Xeon® E-2324G • Memory:16G DDR4 DIMM slots, Supports UDIMM, up to 2666 MT/s	1

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		• Hard Disk: 1T 7.2K SATA×2 • Storage Array: Internal Controllers: SAS_H355 • Rated Power Consumption: Single 250W (Bronze) power supply • Embedded NIC :2 x 1GbE LOM Network Interface Controller (NIC) ports • Device Access: Front Ports: 1x USB 2.0, 1 x iDRAC micro USB 2.0 management port ,Rear Ports: 2 x USB 3.0, VGA, serial connector • Embedded Management:iDRAC9 with Lifecycle Controller, iDRAC Direct, DRAC RESTful API with Redfish • Integrations: Microsoft® System Center VMware® vCenter™ BMC Truesight (available from BMC) Red Hat Ansible • Connections: Nagios Core & Nagios XI Micro Focus Operations Manager i (OMI) IBM Tivoli Netcool/OMNibus • Operating Systems: Certify XenServer, Citrix® XenServer®, Microsoft Windows Server® with Hyper-V Red Hat® Enterprise Linux Ubuntu Server ,SUSE® Linux Enterprise Server VMware® ESXi • With 300 licenses	
9-	Cluster storage hybrid SAN	• Dual controller and real-time cache, optional BBU (Backup Battery Unit), one multi-core processor, 8 GB cache extendable to 32 GB per controller • High-performance, extendable hardware platform • HDD detection and repair/RAID optimization • Surveillance-specialized direct storage (Direct Streaming mode+IP SAN mode) • Advanced data protection (synchronous backup of key information in system disks) • Energy efficient and user-friendly UI • Protocol : iSCSI, RTSP, ONVIF, PSIA • Data Network Interface: 4, 1000M Ethernet interface (4 × 1GbE or 2 × 10GbE is extendable)/Controller. • Management Network Interface: 1, 1000M Ethernet interface/Controller • Mini SAS Interface: Supported • HDD Slot :24 • Interface/Capacity: SSD (optional), SATA/1 TB, 2 TB, 3 TB, 4 TB, 6 TB, 8 TB, 10 TB, 12 TB, 14 TB, 16 TB • Supported Hot-Swapping • HDD Support Single, RAID(Enterprise Hard Disk) • RAID :RAID0, 1, 3, 5, 6, 10, 50, JBOD, Hot-Spare • Direct Streaming Mode: Video (2 Mbps) + Picture 448-ch (recording + playback) • IPSAN Mode:256-ch (recording + playback) • Video /picture Performance 448/448 • Dual controller Structure • Processor:64-bit multi-core processor • Cache: 8 GB (extendable to 32 GB)/controller • Disk Management: Disk inspection, alarm and repair • Logical Volume Management : iSCSI volume, video volume management • Recording Mode: Timing recording, manual recording, dual-stream recording, alarm recording • Searching Mode: Search by time and event • Downloading Mode: Quick download, batch download, download by segment, download by merging • Management Mode: Web-based GUI, serial port CLI, centralized management of multiple devices	1

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		- Alarm Mode: Sound, light, email, message, web page - Power Supply: Redundant - Chassis :4U (19-inch height) - With 24 * 16 TB hard disk enterprise	
10-	NVR 64 channel	- IP Video Input 64 --ch - Incoming Bandwidth 400 Mbps - Outgoing Bandwidth 400 Mbps - Decoding Format H.265+/H.265/H.264+/H.264 - Synchronous Playback 16- Ch - Decoding Capability : 2-ch@32 MP (30 fps) + 2-ch@8 MP (30 fps)/10-ch@8 MP (30 fps)/20-ch@4 MP (30 fps)/40-ch@1080p (30 fps) - Recording Resolution: 32 MP/24 MP/12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/UXGA/720p/VGA/4CIF/DCIF/2CIF/CIF/QCIF - Support Dual-Stream Recording 2 HDMI (different source) and 2 VGA (different source) interfaces, 8K or dual 4K video outputs - Video Output Mode: HDMI 1 and VGA 1 provide simultaneous video output, and work as the main output, HDMI 2 and VGA 2 provide simultaneous video output, and work as the auxiliary output - Supports special cameras, including people counting camera, ANPR (automatic number plate recognition) camera, and fisheye camera - Advanced streaming technology enables smooth live view in poor network conditions - Network Interface 2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface - RAID Type: RAID0, RAID1, RAID5, RAID6, RAID10 - Intelligent analytics based on deep learning algorithm - Alarm In/Out: 16/9 - USB Interface: Front panel: 2 × USB 2.0; Rear panel: 2 × USB 3.0 - SATA 8 SATA interfaces - ESATA : 1 eSATA interface - Capacity Up to 16 TB capacity for each disk - Network Protocol: TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI,, UPnP™, HTTP, HTTPS. - Power Supply: Power Supply100 to 240 VAC, 50 to 60 H	2
11-	NVR 32 channel 4 K	- IP Video Input 32 --ch - Incoming Bandwidth 256 Mbps - Outgoing Bandwidth 256 Mbps - Decoding Format H.265+/H.265/H.264+/H.264 - Synchronous Playback 16- Ch - Support Dual-Stream Recording - HDMI1/VGA1 simultaneous output, HDMI2/VGA2 simultaneous output - Supports special cameras,ANPR Intelligent Analytics: AI By Device : Facial recognition, perimeter protection, motion detection 2.0, AI By Camera: Facial recognition, perimeter protection, video structuralization, throwing objects from building, motion detection 2.0, ANPR, people counting, VCA Facial Detection And Analytics: Face picture comparison, human face capture, face picture search.	1

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		• Face Picture Library: Up to 16 face picture libraries, with up to 50,000 face pictures in total • Motion Detection 2.0: By Device: All channels with same brand cameras, By Camera: All channels. Perimeter Protection: Line crossing, intrusion, region entrance, region exiting (support alarm triggering by specified target types (human and vehicle))Scene change detection • ANPR : By Camera: All channels, Vehicle Attributes: Plate number, license plate color, license plate type, Plate Attributes: Vehicle brand, vehicle color, vehicle type. • Network Interface 2, RJ-45 10/100/1000 Mbps self-adaptive Ethernet interface • Intelligent analytics based on deep learning algorithm • SATA 4SATA interfaces • ESATA 1 eSATA interface • Capacity Up to 14 TB capacity for each disk • Network Protocol: TCP/IP, DHCP, IPv4, IPv6, DNS, DDNS, NTP, RTSP, SADP, SMTP, SNMP, NFS, iSCSI, ISUP, UPnP™, HTTP, HTTPS. • Compatible Browser: IE11, Chrome V57, Firefox V52, Safari V12, Edge V89, or above version • DC 12V: 12 VDC, 1 A power output	
12-	H.D.D 4 T	• WD Purple • Capacity: 4 TB • Style: 64 MB Cache • Hard Disk Interface Serial SATA • Connectivity Technology SATA • Hard Disk Form Factor 3.5 Inches • Hard Disk Rotational Speed 5400 RPM • Built for 24/7 surveillance	1
13-	H.D.D 8 T	• WD Purple • Capacity: 8 TB • Style: 256 MB Cache • Hard Disk Interface Serial SATA • Connectivity Technology SATA • Hard Disk Form Factor 3.5 Inches • Hard Disk Rotational Speed 7200 RPM • Built for 24/7 surveillance	4
14-	SFP SM 10/100/1000	• Single-mode • Dual LC/UPC • DDM : yes • Wavelength : 1310 nm • Maximum Distance : 20K	94
15-	SFP SM 10 Gig	• SFP+ • Single-mode • Dual LC/UPC • DDM : yes • Wavelength : 1310 nm	16

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		Maximum Distance : 10K	
16-	Media converter 10/100/1000 POE SM	IEEE802.3af PoE 10/100TX - 100Base-FX (SC) Single Mode Fiber Converter - 2KM,SC interface	2
17	Industrial switch 4 port POE+2 port SFP	4*10/100/1000Mbps POE ports 2*1000 Mbps SFP uplink ports - Support Web-based network management ,support VLAN,QOS,RSTP,SNMP - Switch capacity :12Gpbs - Package forwarding rate :8.9Mpps - Memory buffer :4M - MAC table :8K - Power Consumption/ Dissipation: minimum 100 watts (max.) - Superior circuit protection up to 6KVA shockproof - Industrial level 4 protection (ESD,RS,EFT,CS) -40C~+75C working temperature	26
18	Switch POE 8 PORT+2 port sfp	- L2 management 8 x 10/100/1000BASE-T RJ45 Auto-MDI/MDI-X ports 2 x 100/1000BASE-X SFP interfaces compo - Supports 100/1000Mbps dual mode and DDM 8 ports with 802.3at/af PoE injector function with Port-1 to Port-8 - CONSOL :1 x RS-232-to-RJ45 serial port (115200, 8, N, 1) - Power : AC 100~240V, 50/60Hz, 2.5A, auto-sensing - Power Consumption/ Dissipation: 170 watts (max.)/580BTU - Switch Architecture: Store-and-Forward - Switch Fabric: 20Gbps/non-blocking - Switch Throughput@64Bytes: 14.88Mpps - Address Table: 8K entries - PoE Standard: IEEE 802.3af/802.3at PoE / PSE - PoE Power Output: Per Port 56V DC, 30 watts (max.) - PoE Power Budget: 140 watts (max.) @ 25 degrees C 120 watts (max.) @ 50 degrees C - PoE Management: PD Alive Check, Scheduled Power Recycling, Poe Schedule, Poe Usage Monitoring, Poe Extension - VLAN:IEEE 802.1Q tagged-based - Link Aggregation: IEEE 802.3ad LACP/Static Trunk,Supports1 trunk groups with 2 ports per trunk - Spanning Tree Protocol: STP, IEEE 802.1D Spanning Tree Protocol RSTP, IEEE 802.1w Rapid Spanning Tree Protocol MSTP, IEEE 802.1s Multiple Spanning Tree Protocol STP BPDU Guard, BPDU Filtering and BPDU Forwarding - IGMP Snooping: IPv4 IGMP (v2/v3) Snooping,IPv4 IGMP Querier Up to 256 multicast groups	19

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		• MLD Snooping: IPv6 MLD (v1/v2) Snooping, Up to 256 multicast groups • QoS: 8 mapping ID to 8 level priority queues - Port number - 802.1p priority - 802.1Q VLAN tag - DSCP field in IP packet Traffic classification based, strict priority and WRR • Ring: Supports ERPS, and complies with ITU-T G.8032 • Access Control List: IPv4/IPv6 IP-based ACL, MAC-based ACL • Security: IP-MAC port binding, MAC filter, Static MAC address, DHCP Snooping and DHCP Option82, DoS attack prevention, ARP inspection, IP source guard • Built-in RADIUS client to co-operate with RADIUS server • Network Access Control: IEEE 802.1X – Port-based authentication RADIUS/TACACS+ user access authentication • Basic Management Interfaces: RS232 Console, Web browser Telnet, SNMP v1, v2c • Secure Management Interfaces: SSHv2, TLS v1.2, SNMP v3	
19	Switch 16 PORT POE+ + 2PORT SFP 1 GIG UP LINK	• L2 management • 16 x 10/100/1000BASE-T RJ45 Auto-MDI/MDI-X ports • 2 x 100/1000BASE-X SFP interfaces compo Supports 100/1000Mbps dual mode and DDM • 16 ports with 802.3at/af/802.3bt PoE++ injector function with port-1 to port-16 • Consol : 1 x RS-232-to-RJ45 serial port (115200, 8, N, 1) • • Power : AC 100~240V, 50/60Hz, 2.5A, auto-sensing • Power Consumption/ Dissipation: 520 watts (max.) • Switch Architecture: Store-and-Forward • Switch Fabric: 40Gbps/non-blocking • Switch Throughput@64Bytes: 29.7Mpps • Address Table: 8K entries • PoE Standard: IEEE 802.3bt PoE++ PSE • PoE Power Output: Per port 54V DC 802.3bt mode, Ports 1 to 16: maximum 95 watts End-span mode: maximum 36 watts Mid-span mode: maximum 36 watts • PoE Power Budget: 400 watts (max) • PoE Management: Port Enable/Disable/Schedule PoE mode control 802.3BT 802.3at End-span 802.3at Mid-span Port Priority • VLAN: IEEE 802.1Q tagged-based VLAN, IEEE 802.1ad Q-in-Q tunneling, Voice VLAN, Protocol VLAN, Private VLAN (Protected port) GVRP, Up to 256 VLAN groups, out of 4094 VLAN IDs • Link Aggregation: IEEE 802.3ad LACP/Static Trunk, Supports 1 trunk groups with 2 ports per trunk • Spanning Tree Protocol: STP, IEEE 802.1D Spanning Tree Protocol RSTP, IEEE 802.1w Rapid Spanning Tree Protocol MSTP, IEEE 802.1s Multiple Spanning Tree Protocol STP BPDU Guard, BPDU Filtering and BPDU Forwarding	3

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخلية الدمج العملياتي
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		- IGMP Snooping: IPv4 IGMP (v2/v3) Snooping, IPv4 IGMP Querier Up to 256 multicast groups - MLD Snooping: IPv6 MLD (v1/v2) Snooping, Up to 256 multicast groups - QoS: 8 mapping ID to 8 level priority queues - Port number - 802.1p priority - 802.1Q VLAN tag - DSCP field in IP packet Traffic classification based, strict priority and WRR - Ring: Supports ERPS, and complies with ITU-T G.8032 - Access Control List: IPv4/IPv6 IP-based ACL, MAC-based ACL - Security: IP-MAC port binding, MAC filter, Static MAC address, DHCP Snooping and DHCP Option82, DoS attack prevention, ARP inspection, IP source guard - Built-in RADIUS client to co-operate with RADIUS server - Network Access Control: IEEE 802.1X – Port-based authentication RADIUS/TACACS+ user access authentication - Basic Management Interfaces: RS232 Console, Web browser Telnet, SNMP v1, v2c - Secure Management Interfaces: SSHv2, TLS v1.2, SNMP v3	
20-	Distribution Managed Switch 8 SFP Port 1 GIG + 2 SFP 10 GIG port	- MANGED 8 x 10/100/1000 SFP PORT 2 x 10 GIG - Consol : 1 x RS-232-to-RJ45 serial port (115200, 8, N, 1) - Power : AC 100~240V, 50/60Hz, 2.5A, auto-sensing - Switch Architecture: Store-and-Forward - Switch Fabric: 20Gbps/non-blocking - Switch Throughput@64Bytes: 14.88Mpps - Address Table: 8K entries - VLAN: IEEE 802.1Q tagged-based VLAN, IEEE 802.1ad Q-in-Q tunneling, Voice VLAN, Protocol VLAN, Private VLAN (Protected port) GVRP, Up to 256 VLAN groups, out of 4094 VLAN IDs - Link Aggregation: IEEE 802.3ad LACP/Static Trunk, Supports 1 trunk groups with 2 ports per trunk - Spanning Tree Protocol: STP, IEEE 802.1D Spanning Tree Protocol RSTP, IEEE 802.1w Rapid Spanning Tree Protocol MSTP, IEEE 802.1s Multiple Spanning Tree Protocol STP BPDU Guard, BPDU Filtering and BPDU Forwarding - IGMP Snooping: IPv4 IGMP (v2/v3) Snooping, IPv4 IGMP Querier Up to 256 multicast groups - MLD Snooping: IPv6 MLD (v1/v2) Snooping, Up to 256 multicast groups - QoS: 8 mapping ID to 8 level priority queues - Port number - 802.1p priority - 802.1Q VLAN tag - DSCP field in IP packet Traffic classification based, strict priority and WRR - Ring: Supports ERPS, and complies with ITU-T G.8032 - Access Control List: IPv4/IPv6 IP-based ACL, MAC-based ACL - Security: IP-MAC port binding, MAC filter, Static MAC address, DHCP Snooping and DHCP Option82, DoS attack prevention, ARP inspection, IP source guard - Built-in RADIUS client to co-operate with RADIUS server - Network Access Control: IEEE 802.1X – Port-based authentication RADIUS/TACACS+ user access authentication - Basic Management Interfaces: RS232 Console, Web browser Telnet, SNMP v1, v2c	3

العطاء رقم م ش ع / ٥٩ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخدمة الدمج العملياتي
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		Secure Management Interfaces: SSHv2, TLS v1.2, SNMP v3	
21	Distribution switch 24 port sfp 1 gig +4port uplink 10 gig	24 1000BASE-SX/LX/BX SFP interfaces Compatible with 100BASE-FX SFP transceiver 4 10GBASE-SR/LR SFP+ interfaces compo Compatible with 1000BASE-SX/LX/BX SFP transceiver - Console: 1 x RJ45-to-RS232 serial port (115200, 8, N, 1) - CPU: ARM A9 800MHz - RAM: 512Mbytes - Flash Memory: 64Mbytes - Power Requirements – AC: AC 100~240V, 50/60Hz - Switch Architecture: Store-and-forward - Switch Fabric: 128Gbps/non-blocking - Switch Throughput: 95.23Mpps - Address Table: 16K MAC address table with auto learning function - ARP Table: 1024 - ACL Table: 900 - Shared Data Buffer: 1.5MB - Jumbo Frame: 9KB - Flow Control: Back pressure for half duplex, IEEE 802.3x pause frame for full duplex - L3 function ,IP Interfaces: Max. 32 VLAN interfaces - Routing Table: IPv4 256 entries IPv6 128 entries - IPv4 hardware static routing IPv6 hardware static routing - Port Configuration: Port disable/enable, Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable Port loopback detect - Port Status: Display each port's speed duplex mode, link status, flow control status and auto negotiation status - VLAN: IEEE 802.1Q tagged based VLAN, up to 4K VLAN groups IEEE 802.1ad Q-in-Q VLAN stacking/tunneling IEEE 802.1v Protocol-based VLAN Port-based VLAN MAC-based VLAN IP Subnet-based VLAN Voice VLAN GVRP for VLAN management, up to 256 VLAN - Spanning Tree Protocol: IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) BPDU Guard, BPDU filtering and BPDU transparent Root Guard STP-based loopback detection - Multicast: IPv4 IGMP v1/v2/v3 snooping IPv4 Querier mode support IGMP Filtering and IGMP Throttling IGMP Proxy reporting	1

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخدمة الدمج العملياتي
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		IGMP mroute-forward mode Up to 255 multicast groups IPv6 MLD v1/v2 snooping Up to 255 multicast groups Multicast VLAN Register (MVR), supports 5 multicast VLANs • Link Aggregation • Storm Control: Broadcast/Multicast/Unicast storm control Rate: 64Kbps-10,000Mbps • QoS:8 priority queues on all switch ports Scheduling for priority queues - Weighted Round Robin (WRR) - Strict priority - Hybrid (DRR/WRR + strict) Traffic classification: - IEEE 802.1p CoS/DSCP/IP Precedence - VLAN ID - ACL - Policy-based ingress and egress QoS • Access Control List: Supports Standard and Expanded ACL - IP-based ACL - MAC-based ACL - ARP ACL - Time-based ACL ACL based on: - MAC Address - IPv4/IPv6 IP Address - Ethertype - Protocol-number/UDP - sport/dport - DSCP - 802.1p Priority Up to 900 entries • Security: Port security Supports static MAC + port binding Defend against DoS or TCP attacks DHCP Snooping, DHCP Option 82 IP source guard Dynamic ARP inspection Command line authority control based on user levels • System Configuration: Console and Telnet Web browser SNMP v1, v2c	
22	Distribution switch 16 port sfp 1 gig +2port uplink 10 gig	• 16 1000BASE-SX/LX/BX SFP interfaces Compatible with 100BASE-FX SFP transceiver • 2 10GBASE-SR/LR SFP+ interfaces compo Compatible with 1000BASE-SX/LX/BX SFP transceiver • Console: 1 x RJ45-to-RS232 serial port (115200, 8, N, 1) • CPU: ARM A9 800MHz • RAM: 512Mbytes • Flash Memory: 64Mbytes • Power Requirements – AC: AC 100~240V, 50/60Hz • Switch Architecture: Store-and-forward • Switch Fabric: 128Gbps/non-blocking • Switch Throughput: 95.23Mpps • Address Table: 16K MAC address table with auto learning function • ARP Table: 1024 • ACL Table: 900	2

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخلية الدمج العمليتي
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		• Shared Data Buffer: 1.5MB • Jumbo Frame: 9KB • Flow Control: Back pressure for half duplex ,IEEE 802.3x pause frame for full duplex • L3 function ,IP Interfaces: Max. 32 VLAN interfaces • Routing Table: IPv4 256 entries IPv6 128 entries • IPv4 hardware static routing IPv6 hardware static routing • Port Configuration: Port disable/enable, Auto-negotiation 10/100/1000Mbps full and half duplex mode selection Flow control disable/enable Port loopback detect • Port Status: Display each port's speed duplex mode, link status, flow control status and auto negotiation status • VLAN:IEEE 802.1Q tagged based VLAN, up to 4K VLAN groups IEEE 802.1ad Q-in-Q VLAN stacking/tunneling IEEE 802.1v Protocol-based VLAN Port-based VLAN MAC-based VLAN IP Subnet-based VLAN Voice VLAN GVRP for VLAN management, up to 256 VLAN • Spanning Tree Protocol: IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) BPDU Guard, BPDU filtering and BPDU transparent Root Guard STP-based loopback detection • Multicast: IPv4 IGMP v1/v2/v3 snooping IPv4 Querier mode support IGMP Filtering and IGMP Throttling IGMP Proxy reporting IGMP mroute-forward mode Up to 255 multicast groups IPv6 MLD v1/v2 snooping Up to 255 multicast groups Multicast VLAN Register (MVR), supports 5 multicast VLANs • Link Aggregation • Storm Control: Broadcast/Multicast/Unicast storm control Rate: 64Kbps-10,000Mbps • QoS:8 priority queues on all switch ports Scheduling for priority queues - Weighted Round Robin (WRR) - Strict priority - Hybrid (DRR/WRR + strict) Traffic classification: - IEEE 802.1p CoS/DSCP/IP Precedence - VLAN ID - ACL - Policy-based ingress and egress QoS • Access Control List: Supports Standard and Expanded ACL - IP-based ACL - MAC-based ACL - ARP ACL - Time-based ACL ACL based on: - MAC Address - IPv4/IPv6 IP Address	
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**العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخدمة الدمج العمليتي
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		- Ethertype - Protocol-number/UDP - sport/dport - DSCP - 802.1p Priority - Up to 900 entries • Security: Port security - Supports static MAC + port binding - Defend against DoS or TCP attacks - DHCP Snooping, DHCP Option 82 - IP source guard - Dynamic ARP inspection - Command line authority control based on user levels • System Configuration: Console and Telnet - Web browser - SNMP v1, v2c	
23	Distribution Managed Switch 8 SFP Port 10 gig + 2 PORT SFP 10 GIG	• 8* 10 GIG BASE-SX/LX/BX SFP interfaces - Compatible with 100BASE-FX SFP transceiver • 2* 10GBASE-SR/LR SFP+ interfaces compo - Compatible with 1000BASE-SX/LX/BX SFP transceiver • Console: 1 x RJ45-to-RS232 serial port (115200, 8, N, 1) • CPU: ARM A9 800MHz • RAM: 512Mbytes • Flash Memory: 64Mbytes • Power Requirements – AC: AC 100~240V, 50/60Hz • Switch Architecture: Store-and-forward • Switch Fabric: 128Gbps/non-blocking • Switch Throughput: 95.23Mpps • Address Table: 16K MAC address table with auto learning function • ARP Table: 1024 • ACL Table: 900 • Shared Data Buffer: 1.5MB • Jumbo Frame: 9KB • Flow Control: Back pressure for half duplex, IEEE 802.3x pause frame for full duplex • L3 function ,IP Interfaces: Max. 32 VLAN interfaces • Routing Table: IPv4 256 entries - IPv6 128 entries • IPv4 hardware static routing - IPv6 hardware static routing • Port Configuration: Port disable/enable, - Auto-negotiation 10/100/1000Mbps full and half duplex mode selection - Flow control disable/enable - Port loopback detect • Port Status: Display each port's speed duplex mode, link status, flow control status and auto negotiation status • VLAN: IEEE 802.1Q tagged based VLAN, up to 4K VLAN groups - IEEE 802.1ad Q-in-Q VLAN stacking/tunneling - IEEE 802.1v Protocol-based VLAN - Port-based VLAN - MAC-based VLAN - IP Subnet-based VLAN - Voice VLAN - GVRP for VLAN management, up to 256 VLAN	2

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخلية الدمج العمليتي
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		- Spanning Tree Protocol: IEEE 802.1D Spanning Tree Protocol (STP) IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) IEEE 802.1s Multiple Spanning Tree Protocol (MSTP) BPDU Guard, BPDU filtering and BPDU transparent Root Guard STP-based loopback detection - Multicast: IPv4 IGMP v1/v2/v3 snooping IPv4 Querier mode support IGMP Filtering and IGMP Throttling IGMP Proxy reporting IGMP mroute-forward mode Up to 255 multicast groups IPv6 MLD v1/v2 snooping Up to 255 multicast groups Multicast VLAN Register (MVR), supports 5 multicast VLANs - Link Aggregation - Storm Control. - QoS: 8 priority queues on all switch ports Scheduling for priority queues - Weighted Round Robin (WRR) - Strict priority - Hybrid (DRR/WRR + strict) Traffic classification: - IEEE 802.1p CoS/DSCP/IP Precedence - VLAN ID - ACL - Policy-based ingress and egress QoS - Supports Access Control List Standard and Expanded ACL - MAC-based ACL - ARP ACL - Time-based ACL ACL based on: - MAC Address - IPv4/IPv6 IP Address - Ethertype - Protocol-number/UDP - sport/dport - DSCP - 802.1p Priority Up to 900 entries - Security: Port security Supports static MAC + port binding Defend against DoS or TCP attacks DHCP Snooping, DHCP Option 82 IP source guard Dynamic ARP inspection Command line authority control based on user levels - System Configuration: Console and Telnet Web browser	
24	24 U RACK CABINET	- Black color - Wall mountable 19" rack size - STEEL WELDED FRAME 60cm *60cm*24U 2 front horizontal brackets, 2 rear horizontal brackets, 16 M5 x 12mm screws, 2 vertical brackets, 96 M6 cage nuts, 96 M6 cage screws, 96 plastic washers, 24 M8 x 16mm bolts, 24 #8 flat washers	1

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخلية الدمج العملياتي
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		- Included 4 fans 2*6 way UK PDU and all accessories	
25	INDOOR CABINET 9U	Communication cabinet 9U : - Wall- mounted . - Lock and key for each locking door and side panel - Holes for cable passage upper and lower . - PDU-6 way , FAN and Rack Shelf . W=600 , H=9U , D=600 .	5
26	Indoor Cabinet 6U	- Wall- mounted / Mounts to wall or rolls on floor ready to assemble with all requirements. - Lock and key for each locking door and side panel - Holes for cable passage upper and lower - PDU-6 way , FAN and Rack Shelf - W=600 , H=6U , D=600	19
27	Water Proof Cabinet	- Outdoor usag for all 19" equipment's - W=600 mm H=6U D>=600 mm - Protection Level IP65 - Galvanized Steel Material - PDU-6 way, Rack Shelf , fan , 2 shutter with filter - Lock and key for locking door - Pole / wall mounting installation with all accessories	26
28	Odf 4 core	4 core fully loaded - Dual SC interface UPC 4 Pigtail SC 9/125 SM 4 sleeve 60mm 2 disk - Rack mounting, drawer style- sliding 2 cable holes , 2 cable fixing bayonets	30
29	Odf 8 core	8 core fully loaded - Dual SC interface UPC 8 Pigtail SC 9/125 SM 8 sleeve 60mm 2 disk - Rack mounting, drawer style- sliding 2 cable holes , 2 cable fixing bayonets	14
30	Odf 12 core	12 core fully loaded - Dual SC interface UPC 12 Pigtail SC 9/125 SM 12 sleeve 60mm 4 disk - Rack mounting , drawer style- sliding 2 cable holes , 2 cable fixing bayonets	1

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31	Odf 24 core	• 24 core fully loaded • Dual SC interface UPC • 24 Pigtail SC 9/125 SM • 24 sleeve 60mm • 4 disk • Rack mounting , drawer style- sliding • 2 cable holes , 2 cable fixing bayonets	5
32	Odf 48 core	• 48 core fully loaded • Dual SC interface UPC • 48 Pigtail SC 9/125 SM • 48 sleeve 60mm • 4 disk • Rack mounting , drawer style- sliding • 2 cable holes , 2 cable fixing bayonets	1
33	Odf 144 core	• 144 core fully loaded • Dual SC interface UPC • 96 Pigtail SC 9/125 SM • 144 sleeve 60mm • 8 disk • Rack mounting , drawer style- sliding • 2 cable holes , 2 cable fixing bayonets	2
34	Fiber cable SM (144 CORE)	• SM, 144 core. • G.652.D. • Optical fiber core. • Armored • 12 tube • optical fiber cable with metallic central strength member of steel wire/strand and moisture barrier inner sheathed. • Cable protected by a corrugated steel armoring and black PE over sheath for protection against mechanical damage and termite or rodent attack • suitable for direct buried or aerial application • Steel wire strength. filler protect tube fiber. steel tape armor. • Double sheath .Good moisture-resistance • High strength loose tube that is hydrolysis resistant • Crush resistance and flexibility • moisture barrier	5000 meter
35	Fiber cable SM 48 core	• SM, 48 core. • G.652.D. • outdoor • Optical fiber core. • Waterproof thixotropic jelly. • PBT Tube. • Non-metallic strength member (Glass yarn). • Ripcord. • Corrugated steel tape. • Figure 8	1000

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		UV resistant polyethylene (HDPE) black outer jacket.	
36	Fiber cable SM (12 CORE)	- SM, 12 core. - G.652.D. - Aerial - Optical fiber core. - Waterproof thixotropic jelly. - PBT Tube. - Non-metallic strength member (Glass yarn). - Ripcord. - Figure 8 - Corrugated steel tape. - UV resistant polyethylene (HDPE) black outer jacket.	2000
37	P.C 2SC-2LC SM	2SC-2LC 3 Meter - SM 9/125 - UPC interface	108
38	FTP CABLE	- F/UTP cable (305 M) / (per box) - Cat6 F/UTP LSOH 100 MBPS SDDI 250 MBPS ATM 1000 BASE-T (GIGABIT ETHERNET) (IEEE 802.3 ab) - Electrolytic solid copper conductor - Solid polyethylene insulation Insulations are stranded into pairs. - Pairs are stranded together with star shaped separator. - Tinned copper earthing wire. - Al/PET tape UV resistant halogen-free outer jacket.	10
39	Ups 1 kva	- RACK MOUNT 1 KVA RT Online double conversion - Tower 2*9AH to give backup time 6 min at full load	4
40	Power Solid 1KVa Single Phase Online UPS	1 KVA RT Online double conversion 1000 VA / 800 Watt 40Hz - 70 Hz Output Voltage :200 / 208 / 220 / 230 / 240 VAC (Derate capacity to 80% of capacity in frequency converter mode or when the output voltage is adjusted to 200/208VAC) Recharge Time : 4 hours recover to 90% capacity (Typical) Backup time:not less than 15 min.	17
41	HDMI CABLE 10M	4k high speed Hdmi cable compatible devices with security camera	13
42	Pole	6M 4 inch - Galvanized steel - قاعدة خرسانية 2 supplied plate for camera	30
43	Pole	4M 4 inch - Galvanized steel 1 supplied plate for camera	9
44	pole	3M	15

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		4 inch - suplised plate for camera	
45	Box 10*10	Water proof plastic box 15cm *15cm	69
46	pipe	25 mm, white color, hardened, 3m for each piece of pipe 600مع مفة عدد 600كروغ عدد 1200مربط عدد	1600meter
47	Power cable	2*2.5 mm - water proof(مطري) - full copper	1500meter
48	Circuit braker	Branch breaker 1 phase - 10 A Preferred :Made in Germany, Italy. Electricity current 220 V - 50Hz Separation capacity 6 kilo ampere	26
49	Installation and operatin	Optional	
50	Network keyboard	- Full-featured network keyboard - Support various cameras, NVRs - Flexible 4-axis joystick - Button can be used to perform powerful functions 128x64 screen displayed all important information	2

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item			Qty(1)
	Hydraulic Road Blockers	• Road Blocker Material & Details Material: Steel S275JR • Finish : Epoxy Paint • Road Blocker Width: (3900-4000) mm • Rising part: not less than 900mm. • Operating Temperature General operation -25°C~+50°C • Protection Class IP 67 • Operating Types Manual: Open and close barrier via manual release of manual valve or manual hand pump. • Normal: Road Blocker opens and closes at normal speeds. Operation is controlled hydraulically, and commands are received via operator input or any access control unit. • Emergency: Road Blocker closes to secure position. Operation is controlled hydraulically, and commands are received via operator input. • Speed of Operation (rising /falling time): 8-10 sec. • Safety photo cell. • Manual lifting: hand pump. • Axle load 30 tons • Power supply: 3-Phase 380 (±10) AC, 50/60 HZ • Control panel :PLC • Easy Maintenance • Compatible with access control systems like plate recognition, card reader, finger print • Operators Hydraulic operator with remote electro-hydraulic power unit (HPU) • HPU (Hydraulic Power Unit) Hydraulic Power Unit: The unit consist of an electrically driven hydraulic pump which pressurize a high-pressure manifold connected to a hydraulic accumulator. • Electrically actuated valves have to be installed on the manifold to allow oil to be driven to the up and down side of a double acting hydraulic cylinder to raise and lower the Road blocker. The hydraulic circuit includes all necessary control logic devices, interconnect lines and valves to override and lock out the normal speed • Control valve(s) for emergency fast operation of the Road blocker (s). • Road Blocker Finish All steel component of the Road Blocker is Steel S275JR has a reflective red or white "STOP" decal, while the vehicle passage side features an anti-skid coating. • HPU Steel Cabinets: Fabricated from metal sheet with seams welded and ground smooth, provide single casketed access door for each cabinet with flush-mounted locks. Furnish two keys for each lock. Fabricate cabinet with internal reinforcing and four mounting holes accessible only from inside of the cabinet. • Traffic Lights: Red/Green colors and diameter is 200 mm. Traffic light alerts the drivers regarding positions of road blocker. The green light indicates that the road blocker is fully down position and the red light indicates that the road blocker is up position. • Loop Detector Vehicle Loop Detector system: Provide self-tuning electronic presence detector with adjustable detection patterns, adjustable sensitivity and frequency setting and panel indicator light designed to detect presence or transit of a vehicle around an embedded blocker. • Fully safe and reliable operation • Must have international crash test certificate like the standard PAS68 crash test. • Must have water pump for water drain.	

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الشروط الخاصة

١. إمكانية الإحالة على كل بند بشكل منفصل.
٢. العطاء شامل التوريد ويتم التسليم في المكان الذي تحدده مديرية الامن السيبراني وتكنولوجيا المعلومات.
٣. أن تكون أجهزة نظام المراقبة (الكاميرات, أجهزة التسجيل (NVR), التراخيص, أجهزة الخوادم, (decoder)) من نفس الشركة الام الصانعة.
٤. ان لا تزيد مدة تصنيع الأجهزة عن سنة شمسية واحدة.
٥. الالتزام بالمواصفات والشروط.
٦. العرض يجب ان يشمل ورقة مطابقة على شكل جدول يحتوي المواصفات المطلوبة والمواصفات المقدمة من الشركة وبالإشارة الى الكتالوج الفني، عدم تقديم هذه الورقة يعطي الحق للجنة الشراء برفض العرض وتكون الشركة مسؤولة عن جميع المعلومات داخلها.
٧. مدة التوريد (١٥) أسبوع من تاريخ تبليغ الشركة.
٨. لامانع من زيارة الشركات موقع تركيب الكاميرات وبالتنسيق مع مديرية الامن السيبراني وتكنولوجيا المعلومات .
٩. تلتزم الشركة بتقديم بند التركيب والتشغيل من خلالها وكخيار مع تحديد التكلفة لهذا البند على ان لا تزيد مدة التركيب عن (٨) أسابيع من تاريخ توريد.
١٠. تلتزم الشركة بكفالة مصنعية للمواد الموردة على ان لا تقل عن ٢٤ شهرا من تاريخ الاستلام النهائي.

العطاء رقم م ش ٥٤ / ٧٩ / ١٦ / ٢٠٢٣ / شراء أنظمة المراقبة الالكترونية وملحقاتها لخلية الدمج
العملياتي ومحيط مجموعة الملك عبدالله الثاني القوات الخاصة الملكية

١١. تلتزم الشركة بتوريد وتنزيل أنظمة التشغيل والبرمجيات وكافة التطبيقات التي يحتاجها النظام و أي متطلبات لازمة لتشغيل النظام بشكل كامل.

١٢. تلتزم الشركة بوضع ليل على المواد الموردة يبين اسن الشركة المحال عليها العطاء ورقم قرار الإحالة، تاريخ التوريد، تاريخ انتهاء كفالة الصيانة.

١٣. تلتزم الشركة خلال فترة الصيانة المجانية بتوفير كافة التحديثات التي تطرأ على أنظمة التشغيل والبرمجيات الخاصة بالمعدات مجاناً.

١٤. تلتزم الشركة بتسليم جميع المخططات والوثائق الخاصة بنظام المراقبة بالكاميرات في حال التركيب والتشغيل من خلالها.

١٥. تلتزم الشركة في البند الثاني بالتركيب والتشغيل والاعمال الانشائية اللازمة.