

3 MP indoor dome camera (50)		
S/N	Item	Required Specification
1	Brand	Please mention
2	Model	Please mention
3	Country of Origin	USA/EU standard
4	Country of Manufacturing	Please mention
5	Video Compression	H.264, MJPEG
6	Max Frame Rate	H.264: 2048x1536@30fps; MJPEG: 1920x1440@30fps
7	ONVIF-Compliant	Yes
8	Resolution	(2048x1536) QXGA 4:3; (1920x1440) 4:3; (1600x1200) UXGA 4:3; (1280x960) SXGA 4:3
9	Imager	1/3.2" CMOS progressive scan
10	Day/Night	Yes
11	Motion Detection	Yes
12	Face Detection	Yes
13	Privacy Zones	Yes
14	Alarms I/O	2/1
15	Minimum Illumination	3MP 3-9mm Color: 0.05 lux B/W With IR: 0.003 lux
16	Dynamic Range	3MP: TWDR 96dB
17	Field of View (H/V)	Wide Angle: 88°/64°; Telephoto: 30°/22°
18	Lens Type	Motorized varifocal
19	Network Interface	Ethernet 10/100Base-TX
20	Ethernet Port	RJ-45
21	Supported Protocols	TCP/IP, IPv4, IPv6, TCP, UDP, HTTP, FTP, DHCP, WS-Discovery, DNS, DDNS, RTP, TLS, Unicast, Multicast, NTP, SMTP, WS-Security
22	Configuration Management	Web Browser: IE 10, 11, Firefox, Chrome, Security: Multi-level, IP address filtering, HTTPS, User access log, IEEE 802.1x
23	Electrical	Power Input: 24VAC, PoE IEEE 802.3af Class 3 Power Draw: 12.95W
24	Dimensions (WxH)	130 x 138 mm (5.12 x 5.43 in)
25	Weight	1 kg (2.20 lbs)
26	Operating Temperature	-10° to 40°C (14° to 104°F)
27	Vandal Resistant	IK10
28	Plenum-Rated	Yes
29	Regulatory Approval	Emissions: EN 55022 Class A; FCC Part 15 Class A; ICES-003/NMB-003 Class A; AS/NZS CISPR 22 Class A Immunity: EN 50130-4; EN55024 Safety: EN 60950-1; UL 60950-1; CSA 22.2 No. 60950-1; IEC 60950-1
30	Warranty	3 Years

31	Integration	Installed camera should be integrated with AC 2000 access control system
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2 MP indoor dome camera (50)		
S/N	Item	Required Specification
1	Brand	Please mention
2	Model	Please mention
3	Country of Origin	USA/EU standard
4	Country of Manufacturing	Please mention
5	Image Sensor	1/3" Progressive Scan CMOS
6	Video Resolution	1920 × 1080
7	Minimum Illumination	0.028Lux @ (F2.0, AGC ON) ,0 Lux with IR
8	Number of Effective Pixels	2MP
9	Electronic Shutter Speed	1/3 s to 1/100,000 s
10	White Balance Mode	Auto/Fluorescent lamp/Incandescent lamp/Warm light lamp/Natural light
11	Lens	2.8mm @ f2.0
12	ICR	IR cut filter with auto switch
13	Noise Reduction	3D DNR
14	Video Compression Format	H.264/ MJPEG
15	Scanning System	Progressive Scan
16	Maximum Frame Rate	50Hz: 25fps(1920 × 1080), 25fps (1280 × 960), 25fps (1280 × 720)60Hz: 30fps(1920 × 1080), 30fps (1280 × 960), 30fps (1280 × 720)
17	Motion Detection Control	Yes
18	Privacy Mask Control	Yes
19	Support Protocol	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,R TSP,RTCP,PPPoE,NTP,UPnP,SMTP,SNMP,IGMP,802.1X, QoS,IPv6,Bonjour
20	Alarm Management	Motion detection, Dynamic analysis, Tampering alarm, Network disconnect , IP address conflict,Storage exception
21	Onvif	Supported
22	Security	HTTPS, SSL, password protection, watermark, IP address filtering
23	Ethernet	1 RJ45 10M/100M Ethernet interface
24	Power over Ethernet	PoE (802.3af)
25	Weight	500g (1.1 lbs)
26	Dimensions	111 × 82 mm (4.4" × 3.2")
27	Power Requirements	12 V DC ± 10% , PoE (802.3af)
28	Power Consumption	Max. 5 W (Max. 7 W as IR cut filter on)
29	Working Temperature	-30 °C – 60 °C (-22 °F – 140 °F)
30	IR Range	IP66

31	Standard	IEC60068-2-75Eh, 20J; EN50102, upto IK10
32	Warranty	1 Year

Video Management Software		
S/N	Item	Required Specification
1	Brand	Please mention
2	Country of Origin	USA/EU standard
3		Powerful, Intuitive Video Management System (VMS) <ul style="list-style-type: none"> • Effectively monitor video, audio and data in real time • Two-way audio • Interactive mapping • Data integration from retail and access control systems • Notification overlays • Reduce review time and conduct investigations seamlessly • Powerful thumbnail and timeline search capabilities • Export video in open-standard video format • Or export as a self-contained player with tamper protection • Constantly Expanding Functionality with Included Software Updates • Get more video management features without replacing your entire VMS • Includes 1 year free software updates (three years on exacqVision NVRs) • Ease of Use & Flexibility <ul style="list-style-type: none"> • Requires little to no training • Software installs in minutes • EasyConnect automatically finds, assigns and addresses compatible IP cameras • Easily add IP camera licenses at any time • Per camera server licensing with no base server fee • Flexible Deployment <ul style="list-style-type: none"> • exacqVision Professional VMS software comes pre-configured and pre-installed on exacqVision out-of-the-box network video recorders • Installs on third-party servers • View Video Anywhere with Free Client Software <ul style="list-style-type: none"> • Select the interface that works best for you • Access live and recorded video on Windows, Linux or Mac PCs • Use the free web service application in any modern browser • Download the free Exacq Mobile app available for iOS, Android, Windows Phone 8

		<ul style="list-style-type: none"> • Highly Scalable • Single client connects to thousands of servers • Allows you to connect up to 64 analog and 128 IP cameras on exacqVision hybrid servers • Offers high video throughput with minimal CPU and RAM requirements necessary
		<ul style="list-style-type: none"> • Build a Best-of-Breed Physical Security System • Integrates with: • Over 2,000 IP cameras and encoders from more than 60 manufacturers • 20 access control systems • Video analytics solutions for license plate recognition, heat mapping and intrusion detection • Retail/Point-of-sale analytics
4	Integration	Installed camera should be integrated with AC 2000 access control system

Network Video Recorder (4)		
S/N	Item	Required Specification
1	Brand	Please mention
2	Model	Please mention
3	Country of Origin	USA/EU standard
4	Country of Manufacturing	Please mention
5	Maximum IP Cameras	16-ch
6	Two-way audio input	1-ch, RCA (2.0 Vp-p, 1kΩ)
7	Incoming bandwidth	100Mbps
8	Outgoing bandwidth	80Mbps
9	Remote connection	128
10	Protocol	IPv4, IPv6, TCP/IP protocol, PPPoE, DHCP, DNS, DDNS, NTP, SADP, SMTP, SNMP, NFS, and iSCSI are supported. TCP, UDP and RTP for unicast, UPnP, ONVIF, PSIA
11	Security	HTTPS, SSL, Watermark, User Authentication
12	Recording resolution	5MP/3MP/1080P/UXGA/720P/VGA/4CIF/DCIF/2CIF/CIF/QCIF
13	HDMI output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz
14	VGA output	1-ch, resolution: 1920 × 1080P /60Hz, 1600 × 1200 /60Hz, 1280 × 1024 /60Hz, 1280 × 720 /60Hz, 1024 × 768 /60Hz
15	Audio output	1-ch, RCA (Linear, 1kΩ)

16	Hard Disk	SATA: 2 SATA interfaces for 2 HDDs; Capacity: Upto 4TB for each disk 8 TB from Day 01.
17	Network interface	1 RJ-45 10 /100 /1000 Mbps self-adaptive; Ethernet interface
18	USB interface	1 × USB 2.0 and 1 × USB 3.0
19	Motion Detection Control	Yes
20	Power Requirements	220V AC
21	Power Consumption	≤10W (without hard disk)
22	Warranty	1 years, parts & labor

Access Switch (PoE) (4)		
S/N	Features	Specifications
1	Quality	ISO 9001/9002 for manufacturer, FCC Class A/B for quality assurance
2	Brand	Please mention
3	Model	Please mention
4	Country of Origin	USA/UK/EU/Japan
5	Environmental	Maintain International Quality Environmental Safety Standard
6	Form factor	Rack Mountable with Rack Mounting Kit
7	Environmental	Maintain International Quality Environmental Safety standard
8	General Features	Should have min 24 x 10/100/1000 Gigabit PoE Ethernet Ports & 4 x Gigabit SFP uplink ports.
		Should supply 4 x 1GE Multi-Mode SFP based optical modules for Access Switches to connect distribution switches or other access switches. Should supply and install OEM Original Module.
		Each port should have minimum 15.4 watt PoE capability
		Switch should be stackable / virtual chassis link or similar technology
		Should support redundant power supply port to provide power from alternate source
9	Performance	Minimum Switching bandwidth - minimum 95 Gbps
		Minimum Forwarding bandwidth - minimum 47 Gbps
		Forwarding rate (64-Byte L3 Packets) - minimum 67 Mpps
		MTU: Minimum 9198 bytes
		Jumbo Frame: 9216 bytes
10	Layer-2 Features	IEEE 802.1Q VLAN encapsulation. Upto 64 VLANs should be supported. Support for 4000 VLAN IDs.
		Supported RFC: IEEE 802.1p, IEEE 802.1Q, IEEE 802.1ab, IEEE 802.1X, IEEE 802.1w, IEEE 802.3ad, IEEE 802.3ah, IEEE 802.3x, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3z
		Support port Autonegotiation, MDIX, LACP, UDLD
11	Security	Support 802.1X, Flexible Authentication, 802.1x Monitor Mode, and RADIUS Change of Authorization

		Should support NetFlow-Lite/Sflow/Jflow and exports flow data in standard NetFlow Version 9
		Support Port-based ACLs, VLAN ACLs
		Support IPv6 ACLs
		Support Unicast Reverse Path Forwarding (RPF)
		Support Port Security, Dynamic ARP Inspection, and IP Source Guard
		Support to verify and authentication of OS images
12	QoS Features	Support automatic configuration of QoS
		Support eight egress queues per port
		Support QoS across stack member or virtual chassis of switches
		Support committed rate features to control bandwidth as low as 10 Kbps.
		Support congestion avoidance feature like SRR/SRR/similar protocol
		Support 802.1p class of service (CoS) and Differentiated Services Code Point (DSCP) classification, with marking and reclassification on a per-packet basis by source and destination IP address, MAC address, or Layer 4 TCP/UDP port number.
13	Resiliency	Should support Ethernet aggregation/similar protocol for link aggregation between different members of the stack / virtual chassis
		Should support Switch port automatic recovery due to link failure/fault or network fault
		Should support link redundancy with convergence time less than 150 milliseconds
14	Management	Support diagnostic commands and system health checks within the switch
		Support automatic configuration of QoS
		Support Remote Monitoring (RMON) software with four RMON groups (history, statistics, alarms, and events).
		Support Power management and measurement
		support Layer 2 troubleshoot features
		Support SSHv2, Telnet, console, NTP, DNS, TFTP, DHCP
		Support RMON I and II standards
		Support SNMP v1, v2c, and v3
15	Manufacturer part number	Should submit BOQ of proposed device including the details part numbers and Manufacturer Warranty.
16	Warranty	Minimum 1(one) year

LED TV (2)		
S/N	Item	Required Specification
1	Brand	Please mention
2	Model	Please mention
3	Country of Origin	Korea/Japan
4	Screen size	40.0" Measured Diagonally
5	Resolution	1920 x 1080
6	Clear motion rate	120
7	Audio (Dolby)	Dolby MS10
8	Speaker	10W x 2 Down Firing + Full Range
9	Wireless Connectivity	Built-in Wi-Fi
10	Inputs & Outputs	HDMI - 3
		USB - 2
		Ethernet - 1
		Component - 1
		Composite In (AV) - 1 (Common Use for Component Y)
		RF In (Terrestrial/Cable Input) - 1 (Common Use for Terrestrial)/0
		Digital Audio Out (Optical) - 1
		Audio Out (Mini Jack) - 1
		IR out - Yes
		RS232C - 1
11	Typical Power Consumption	38W
12	Maximum Power Consumption	98W
13	Warranty	3 Years

STP cable for camera connection		
S/N	Item	Required Specification
1	Brand	Please mention
2	Part Number	Please mention
3	Country of Origin	USA/EU standard
4	Country of Manufacturing	Please mention
5	Jacket Material	PVC
6	Conductor Material	Bare copper
7	Drain Wire Material	Tinned copper
8	Insulation Material	Polyolefin
9	Shield (Tape) Material	Aluminum/Poly
10	Diameter Over Jacket	7.239 mm 0.285 in

11	Jacket Thickness	0.508 mm 0.020 in
12	ANSI/TIA Category	6
13	dc Resistance, maximum	9.38 ohms/100 m
14	Mutual Capacitance	5.6 nF/100 m @ 1 kHz
15	Nominal Velocity of Propagation (NVP)	68%
16	Transmission Standards	ANSI/TIA-568-C.2 CENELEC EN 50288-6-1 ISO/IEC 11801 Class E
17	Environmental Space	Non-plenum
18	Flame Test Method	CMR
19	Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
20	Cable Type	F/UTP (shielded)
21	Conductor Gauge, singles	23 AWG
22	Conductor Type, singles	Solid
23	Drain Wire Gauge	24 AWG
24	Separator Type	Isolator
25	Regulatory Compliance/Certifications	RoHS 2011/65/EU; ISO 9001:2008
26	Warranty	3 Years

Cabling accessories		
S/N	Item	Required Specification
1	Patch panel	Supply,fitting & fixing of 24 port Shielded patch panel
		Brand: Please mention
		Origin: USA/EU standard
2	Faceplate	Supply,fitting & fixing of Single port faceplate
		Brand: Please mention
		Origin: USA/EU standard
3	Patch cord	1/3 meter patch cord
		Brand: Please mention
		Origin: USA/EU standard
4	Modular Jack	Shielded Cat6 modular jack
		Brand: Please mention
		Origin: USA/EU standard
5	MK Box	Plastic MK box
6	Conduit works	PVC pipe,channel and related accessories