Tender specification for Surveillance/CCTV Equipment for MCHC building Ayub Teaching Hospital Abbottabad

Sr. #	Description	Specifications	Per Item Rate	Quoted Rated
1	Indoor & Outdoor Cameras.	8MP, 4K UHD, high image definition, Outputs max. 8MP (3840 × 2160, H.265 codec, high compression rate, low bit rate · Built-in IR LED, 30 m , 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, and voltage detection , Alarm: 1 in, 1 out , Supports max. 256 G Micro SD card, built-in Mic, 12V DC/Poe power supply IP67 protection.	1	
2	8MP Full-color Active Deterrence Network Camera	8MP, 4K UHD CMOS image sensor, low illuminance, high image definition, Outputs max. 8MP (3840 × 2160) @20 fps and supports 8MP (3840 × 2160) @25/30 fps , H.265 codec, high compression rate, low bit rate, Built-in warm illuminator, and the max. illumination distance: 30 m, 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 (the three functions support the classification and accurate detection of vehicle and human), 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, Red and blue flashlight alarm,	1	
3	Indoor Vari- focal Network Camera	5MP, CMOS image sensor, low luminance, and high image definition. Outputs max. 5MP (2592 × 1944) @20 fps, and supports 4MP (2688 × 1520) @25/30 fps H.265 codec, high compression rate, low bit rate, Built-in IR LED, max. IR distance: 40 m, ROI, SMART H.264+/H.265+, flexible	1	

•		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 (support the classification and accurate detection of vehicle and human), 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, SMD Plus.		
4	Outdoor 4 MP	4Megapixel progressive scan CMOS	1	
	intelligent	H.265 & H.264 triple-stream encoding, WDR (140 dB), Al		
	Cameras	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 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		* "
5	Outdoor 12 MP	12MP (4000 × 3000) @25/30 fps, H.265 codec, high	1	
	intelligent	compression rate, ultra-low bit rate, IR distance: 50 m		
	Cameras for	Rotation mode, DWDR; 3D DNR, HLC, BLC, digital		
	high end coverage,	watermarking, ROI, SVC, SMART H.264+/H.265+, flexible		
		coding, Perimeter Protection , Abandoned object; missing		
		object, Face Detection , Video Metadata , ANPR , People		
		Counting , Queue Management, Alarm: 3 in, 2 out; audio:		
		1 in, 1 out; RS-485; BNC; supports max. 256 G SD card,		
		24V AC/12V DC/Poe power supply, IP67, IK10 protection,		
		Five streams for three-channel HD video		

. 6	Artifice	4MP, CMOS image sensor, low luminance, high image	1	
	Intelligence base Facial	definition, 4MP (2688×1520) @50 fps/60 fps, H.264&H.265		a
	Reorganization	coding, high compression ration, Alarm: 3 in, 2 out; audio:		
	Camera.	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		= 1
		number and pass number), display and output		
		daily/monthly/annual statistics, No. in area, 2.7 to 12mm Motorized Lens		
	1	12V DC/24V AC/, IR Distance Minimum 50m , IP67, IK10		
		protection grade.		
7	Autifica	2MP Full HD Artificial Intelligence ANPR Camera, white	1	
	Artifice Intelligence	light, Embedded with Deep learning LPR Engine, Supports		
	License plate Cameras.	vehicle video detection with high detection rate; supports		
	carrieras.	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 2.7-13.5mm		
		motorized lens and white light, ideal for monitor ANPR		
		distance, IP67, and superior performance for outdoor		

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		applications, Embedded with LPR algorithm inside the		
*		camera, Vehicle data structuring: license plate recognition,		
		vehicle size, vehicle color detection and etc.		
8	Mini IR PTZ	1/2.8" STARVIS™ CMOS, Powerful 4x optical zoom	1	
	Network	Support Triple-streams encoding, WDR, Day/Night(ICR),		
	Camera	Ultra DNR, Max. 25/30fps@1080P		
		IVS, Support Poe, IR distance up to 30m with Built-in Mic		
9	Mini PTZ	4MP, 25/30fps@4M, Deep-learning, Pro AI performance:,	1	
	Cameras for	Perimeter protection, Video Structuralization, 25x optical		
	Nursery.	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,		
10	PTZ Speed	4Megapixel 45x optical zoom, Max. 25/30fps@4MP, Deep-	1	
	Dome Cameras	learning-based auto tracking and perimeter protection, IR		
	for Outdoor	distance up to 250m, IP67, IK10, Operating Temperature: -		
	Surveillance.	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,		N 9
		Face Detection etc.		
11	Supply of 32	32 Channel AI NVR	1	
	Channel Artifice	Smart H.265+/H.265/Smart		
	Intelligence	H.264+/H.264/MJPEG		
	Enabled NVR	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, Un to 9 TP conscitutor and UDD	T	
	25	8 SATA III Ports, Up to 8 TB capacity for each HDD		
+		2 RJ-45 Ports (10/100/1000Mbps)		
12	12 Network Video Surveillance	128-channel IP video access, Industry embedded micro-	1	
	Recorder	controller, Incoming bandwidth: 512Mbps		1
		Recording bandwidth: 400Mbps		
		Outgoing bandwidth: 512Mbps Human Face Properties		
		Supports 6 properties: Gender, age range, glasses,		
		expression, mouth mask, and beard Face detection, face		
		recognition, video metadata, IVS (tripwire, intrusion,		
		missing object, and more), People counting, smoking		
		detection, call detection		
		Resolution16MP/12MP/8MP/6MP/5MP/4MP/3MP 1080P/960P/720P/D1/CIF/QCIF Face detection, face		
		recognition, video metadata, IVS (tripwire, intrusion, missing object, and more), people counting, smoking		
		detection, call detection Face detection, face recognition, video metadata, (tripwire, intrusion, missing object, and more), People counting, smoking detection, call detection,		
		perimeter protection, faces recognition with normal		
		Cameras, and face recognition with face detection Cameras. video metadata, face databases with 300,000		
		face pictures in total , Supports RAID 0/1/5/6/10, 3		
		HDMI/2 VGA video output, , H.265 & H.264, 8 HDD, 2 VGA&3 HDMI, 4 RJ45(1000M), 4 USB(2USB3.0),		
		RAID0/1/5/6/10,		
13	Central	Main Processor Intel i5, 64 bits 4 Core Processor,	1	
	Management	Operating System Embedded Linux with 8GB memory,		
	Server.	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,		
		and age,		

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•		Bandwidth of Video Input/output per Server 650 Mbps.,		
		Storage Environment Temperature -20°C ~ + 70°C,		
		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 1500		
		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.		
14	Recording	Recording Storage Enterprise Grade	1	
	Storage Device	8 TB		
15	Video Wall	55" FHD Video Wall Display Unit, Industrial level IPS LCD	1	
	Display Unit	panel, suitable for extensive 24/7 continuous works ,Ultra-		
	Ultra Narrow	narrow 1.8mm bezel-to bezel design (0.9mm even panel		
	Bezel	bezel)Brightness/Luminance 700 cd/m²/nits, Response		
		Time 8ms, Display Color 10bit(1.07B),Video Wall structure		
		Wall mount ,LCD Technology IPS ,Color 10Bit , 1.06 Billion		
		Colors ,Response time 8 ms ,Contrast ratio (typical)		
		4000:1 ,Viewing Angle H178°, V178 ,LCD backlight lifetime		
		50,000hrs or more Input VGA, DVI, BNC, HDMI ,Output		
		VGA, DVI, BNC ,Power Supply AC100V~AC240V, 50/60 H		
		Certifications CE/FCC etc.		
16	Industrial Grade	55"(16: 9) UHD LED monitor, Built-in Android system, LED	1	
	Display Unit for	backlight, 3840×2160, 350cd/m2, 1200: 1 static contrast,		
	24/7	178/178 view angle, 8ms response time, 1.07B/10bit		
	Surveillance	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		
17	Multi-Screen	Multi-screen Video Controller ,ATCA industry box, 10	1	
	Controller	service card slots, every slot supports various service card,		



18	Base for	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.		
18	Screens.	Aluminum Good Quality Base, for Each Screen.	1	
19	Bracket for Screens.	Aluminum Good Quality Back Bracket, for Each Screen.	1	
20	PC for Cameras Monitoring and Management.	Intel® 9th Generation Core i7- Processor 12MB Cache or Better • 2GB Dedicated Nvidia Graphic Card or Better • 8GB DDR4 RAM • 1TB HDD • Intel Gigabit Ethernet, Keyboard, Mouse.	1	
21	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	1	
22	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	1	



()	08 Port Industrial Grade POE Network Managed Gigabit Switch with 4 SFP Ports.	8 Ports Industrial Full Gigabit Poe Managed Switch Provide 8* 10/100/1000Base-T Ethernet ports (Poe) + 4* 1000BASE-X SFP Ports, Support 4K high-definition video transmission; PoE Function: support IEEE802.3af/at standard, each port supports up to 60W PoE Output; Support Web-based network management, support VLAN, QoS, RSTP, SNMP, Support IGMP Snooping etc. network	1	
		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°C~75°C working temperature Support redundant Power Supply Rail/Rack kit Fitting CE、FCC、ROHS Certified		
C F	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.	1	
	CAT-6 Network Cable	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; Topnotch quality guarantee for 10 year	1	
	Optical fiber cable	12 core optical fiber cable in Good Quality Duct / U-PVC, / Conduit including Splicing, Patch Cord, Pigtail and Related installation accessories.	1	

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+27	OFDF	OFDF 24 Port with accessories of OFC related.	1	
28	OFDF	OFDF 08 Port with accessories of OFC related.	1	
29	SFP	Gigabit SFP Fiber Module	1	
30	IT Rack 42U	Floor Standing, Perforated Dual Compartment Door, 2	1	
		Fixed Tray and 1 sliding tray, 4 Fans, Fan kit and PDU,		
		Compatible to cater all accessories as per the CCTV design.		
31	Weather Proof	Weather Proof Rack/ Edge DB Box to inbuilt, Poe switch, ,	1	
	Rack	Circuit Breaker, , PDU , ODF etc.		
32	Power Cable	2.5 mm 2 Core Power Cable in Feet including Civil work	1	
		pure copper above than 99%		
33	Power Backup	ONLINE Branded 10 kVA, 0.8 PF Long Backup UPS with up	1	
		to 4 Hrs. on 80% load.		
34	Poles	Galvanized Poles for Cameras 10 Feet with, Base, Civil Work complete in all aspects.	1	
35	Water-proof	Aesthetic design, Material: aluminum / PVC, junction box	1	
	Junction Box For			
	Camera Mount			
36	HDMI Cable	HDMI Cable 10 Meter 4K Supportive.	1	
37	Main Control Room	Wood Paneling, 2 Ton AC, 2 Chair and Counter Table, with	1	
	Installation	installation accessories,		
38	Digging and Road Cutting.	Lying of OFC, UTP Cable, lying of warning tape, backfilling, Installation of route indicators.	1	
39	Control Room	Earthing of Control Room Equipment.	1	
	Earthing			
40	Installation / Commissioning	Relevant Installation / Commissioning of CAT-6 Network Cable & Power Cable	1	
42	Installation / Commissioning	Relevant Installation / Commissioning of Optical Fiber Cable.	1	
43	Installation / Commissioning	Relevant Installation / Commissioning Configuration Services for quoted equipment / store,	1	

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