SURVEY OF PAKISTAN

TECHNICAL EVALUATION OF CCTV CAMERA SYSTEMS

CCTV System including 09x IP Cameras, 1xPtz Dome Camera and 16 Channel NVR with all req Accessories

Sr. #	Items	Specifications	Qty	M/s egs	M/s Vital International Ltd
1	NETWORK IP CAMERAS	6.0 mega pixel WDR (wide dynamic range)	09	DAUHA (DH-HFW2831TPASS) Bullet 8 MP Fixed-Focol Camera	DAUHA Tech 8MP IR Fixed-focal Bullet Wiz Sense Network Camera Model: IPC-HFW2841S-S
		Resolution: 3072 x 2048, Max 25fps		8MP (3840 x 2160) @ 15 fps, and supports 2688x1520 (2688 x 1520) @25/30 fps	➢ 8-MP 1/2.7" CMOS image sensor, low luminance, and high-definition image
		POE (power over Ethernet) Network camera		POE	➢ Outputs max. 8 MP (3840 x 2160) @ 20 fps, and supports 2688 x 1520 (2688 x 1520) @25/30 fps
		HLC (Highlight Compensation) & BLC (Backlight Compensation) supported		HLC/BLC	➢ H.265 codec, high compression rate, ultra-low bit rate
		Water proof, Privacy mask, Motion Detection, Digital Defog		Water proof, Privacy mask, Motion Detection, Digital Defog	➢ Built-in IR LED, and the max. illumination distance is 30m
		Face detection, People counting, Tempering Alarm		Face detection, People counting, Tempering Alarm	➢ ROI, SMART H. 264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
		Day/night functionality		Day/night functionality	➢ Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking applicable to various monitoring scenes.
		1/3″ progressive scan, CMOS		1/2.7″ 8Megapixel progressive CMOS	
		Smart IR up to 30M IR distance		Smart IR up to 80M IR distance	
		2D/3D DNR (Digital noise reduction)		2D/3D DNR (Digital noise reduction)	➢ Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
		Optical Glass Window, IR anti-reflection window		Optical Glass Window, IR anti-reflection window	
		Ultra 265, MJPEG, ONVIF Conformance		Ultra 265, MJPEG, ONVIF Conformance	➢ Abnormality detection: Motion detection, video tempering, audio detection, no SD card, SD card full,
		Multiple Stream		Multiple Stream	
		IP 67 or IP 68 Dustproof		IP 67	

					SD card error, network disconnection, Ip conflict, illegal access, and voltage detection.
					➢ Supports Max. 256G Micro SD card; built in MIC
					➢ 12VDC/Poe power supply
					➢ IP67 protection
					➢ SMD plus
2	NETWORK PTZ DOME CAMERA	4 MP Progressive scan HD up to 1920 × 1080 resolution	01	1/1.8" 4-Megapixel CMOS progressive scan, 2560 x 1440 resolution	DAHUA TECH 4MP 25x Starlight IR Network PTZ Camera SD49425GB-HNR
		Smart IR up to 100M IR distance		Smart IR up to 150M IR distance	➢ 1/2.8" STARVIS™ CMOS
		30 X Optical Zoom		25 X Optical Zoom	➢ 25x optical zoom
		Multiple stream, Micro SD up to 64 GB		Multiple stream, Micro SD card (512 GB); FTP/SFTP; NAS	➢ Starlight technology
		Digital Zoom Supported		Digital Zoom Supported	➢ Max. 25/30fps@4M
		IP 66 or 67		IP67, IK10, TVS 6000 V lightning proof; surge protection; voltage transient protection	➢ IR distance up to 100m ➢ Perimeter protection ➢ Face detection
		POE Network camera. HLC and BLC supported		POE, HLC/BLC	➢ SMD 4.0. ➢ IP66
		Water proof, Privacy mask, Motion Detection, Digital Defog		Water proof, Privacy mask, Motion Detection, Digital Defog	
		Face detection, People counting, Tempering Alarm		Face detection, People counting, Tempering Alarm	
		Day/night functionality		Day/night functionality	
		2D/3D DNR (Digital noise reduction)		2D/3D DNR (Digital noise reduction)	
		Optical Glass Window, IR anti-reflection window		Optical Glass Window, IR anti-reflection window	
		Ultra 265, MJPEG, ONVIF Conformance		Ultra 265, MJPEG, ONVIF Conformance	
3	NVR	16 channel NVR with 20-25 days recording capacity	01	Dahua (DHI-NVR5216-EI) 16 Channels 1U 2HDDs WizSense AL NVR with 20-25 days recording capacity	DAHUA TECH 16 channels 4HDDs WizSense Network Video Recorder Model: NVR5416-EI
		Support 2-ch HDMI, 1-ch VGA, HDMI2 at up to 4K (3840x2160) resolution		1 VGA, 1 HDMI VGA: 1920x1080, 1280x1024, 1280x720 HDMI: 3840x2160, 1920x1080,1280x1024,1280x720 Heterogeneous video source output for HDMI and V	➢ Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format ➢ Max. decoding capability: 32 x 1080p@30fps or 16 x 4MP @30fps.
		Up to 12 Megapixel resolution recording		32MP; 24MP; 16MP; 12MP; 8MP; 5MP; 4MP; 1080p; 720p; D1; CIF; QCIF	➢ Max. 384 Mbps incoming/recording/outgoing bandwidth ➢ Support AcuPick with Max. 16-Channel

#	Item	Specification	Qty	Offered	Details
		Support H.265 video formats		Support H.265 video formats	➢ Support N+M cluster
		4 SATA HDDs, up to 8 TB for each HDD support		2 SATA HDDs, up to 8 TB for each HDD support	➢ AI by recorder: 2-Channel face detection and recognition, 4-channel perimeter protection, and 8-channel SMD Plus
		Support various VCA detection alarm and VCA search		Support various VCA detection alarm and VCA search	➢ AI by camera: Face detection and recognition, perimeter protection SMD Plus, metadata, ANPR, stereo analysis, heat map and people counting
		Support for P2P, UPnP, NTP, DHCP, PPPoE		Support for P2P, UPnP, NTP, DHCP, PPPoE	➢ Security baseline 2.3
4	LED	Smart TV LED (SONY/SAMSUNG/LG)	01	LG C3 48inch OLED Screen	43" UHD LED Monitor, 4K Ultra-HD resolution, Built-in 3D COMB filter and 3D noise reduction, 8.5ms response time for no motion blur, judder or ghosting, 1.07G colors, for a realistic and immersive visual experience, High fidelity digital processing for a brilliant and vivid video, 178º/178º extra-wide viewing angle for overall viewing performance, Professional thermal design to extend equipment lifespan, Built-in power, low energy consumption
		Screen display 32 inch		Screen display 48 inch	
		4K (UHD) - 2160p, or 3840 x 2160 pixels		4K (UHD) - 2160p, or 3840 x 2160 pixels	
		HDR		HDR	
		Dual screen		N/A	
		OLED with viewing angle upto 85 degree		OLED with viewing angle upto 85 degree	
5	UPS	2Kva with Dry Battery upto 150 AH (Exide or Volta), 100 watts rated output, 3 to 4 hours recharge time, 1 Hour backup time	01	UPS 2KVA Deluxe Optima 2000 with 2 X 150AH dry Battery	2 KVA online UPS with 150 AH Dry Battery
6	NETWORKING	Complete networking solution for the proposed mode of communication with Optical fibre and Cat-6 (Quote with Fiber Network including Switches, Module, Outdoor/Indoor cabinet etc.)	01	Local, complete	DAHUA TECH 4-Port PoE Managed Switch Model: PFS4206-4P-96 ➢ Layer 2 Managed PoE switch ➢ MAC auto study and aging, MAC address list capacity is 8K ➢ Support IEEE802.3af, IEEE802.3at, Hi-PoE standard ➢ Support RSTP ➢ Industrial wide temperature design ➢ PoE Management Payment: As per Tender Terms. Delivery Period: : As per Tender Terms. Installation: : As per Tender Terms. Validity: : As per Tender Terms. Delivery Location: Free Delivery at Consignee.
		Proper power sockets with an weather proof security box for POE's and other equipment to keep all the supporting items like POE's, switches etc.		Local	
		Good strength poles for the deployment of cameras.		-	
		Underground cabling where required, Proper ducting where required		-	
		Proper power provisioning for each pole to provide electric power.		-	
		Warranty: 2 year's parts and 3 years' service.		-	
		All participating vendors/bidders must be registered with Pakistan Engineering Council with field of Specialization, EE02 under relevant class		-	

		for the year 2023/24. All Bidders must visit office for pre-bid meeting/ consultation for correct bidding.			Warranty One year warranty or as per the Tender Terms.
		Note:	Wiring with all relevant material must be provided by the vender.	-	
			Quote Complete wiring package with detail qty and P/RFT cost.	-	

Bids offered by both firms have been evaluated. M/s EGS does not comply with Technical Specs and hence rejected. Whereas, M/s Vital International meets technical specifications and is recommended for further necessary action, please.

Specifications - CCTV System including 16x IP Cameras, 1 x PTZ Dome Camera And 32 Channel NVR With All Req Accessories

Sr. #	Items	Specifications	Qty	M/s egs	M/s Vital International Ltd
1	NETWORK IP CAMERAS	6.0 mega pixel WDR (wide dynamic range)	16	DAJUA (DH-IP-HFW2831TPASS2) Bullet 8MP Fixed-Focol Camera	DAHUA TECH 8 MP IR Fixed-focal Bullet WizSense Network Camera Model: IPC-HFW2841S-S
		Resolution : 3072 x 2048, Max 25fps		8MP (3840 x 2160) @ 15 fps, and supports	➤ 8-MP ½.7" CMOS image sensor, low luminance, and high definition image.
		POE (power over Ethernet) Network camera		POE	➤ Outputs max. 8 MP (3840 x 2160) @20 fps, and supports 2688 x 1520 (2688 x 1520) @25/30fps.
		HLC (Highlight Compensation) & BLC (Backlight Compensation) supported		HLC/BLC	➤ H.265 codec, high compression rate, ultra-low bit rate.
		Water proof, Privacy mask, Motion Detection, Digital Defog		Water proof, Privacy mask, Motion Detection, Digital Defog	➤ Built-in IR LED, and the max. Illumination distance is 30 m.
		Face detection, People counting, Tempering Alarm		Face detection, People counting, Tempering Alarm	➤ ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
		Day/night functionality		Day/night functionality	
		1/3″ progressive scan, CMOS		1/2.7″ 8Megapixel progressive CMOS	➤ Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
		Smart IR up to 30M IR distance		Smart IR up to 80M IR distance	➤ Intelligent monitoring: Instruction, tripwire (the two functions support the classification and accurate detection of vehicle and human).
		2D/3D DNR (Digital noise reduction)		2D/3D DNR (Digital noise reduction)	
		Optical Glass Window, IR anti-reflection window		Optical Glass Window, IR anti-reflection window	
		Ultra 265, MJPEG, ONVIF Conformance		Ultra 265, MJPEG, ONVIF Conformance	➤ Abnormality detection: Motion detection, video tampering, audio detection, video tampering, audio detection, no SD card, SD card error, network disconnection, IP conflict,illegal access, and voltage detection.
		Multiple Stream		Multiple Stream	➤ Supports max. 256 G Micro SD card; built in MIC.
		IP 67 or IP 68 Dustproof		IP 67	➤ 12VDC/Poe power supply. ➤ IP67 protection. ➤ SMD Plus.

3	NVR	32 channel NVR with 20-25 days recording capacity	01	DAHUA (DHI-NVR5432-4KS2) 32 Channel 1.5U 4K&H.265 pro, 4HDD, 320Mbps, NVR 4K NVR, Up to 32 channel IP cameras can be connected.	➢ 32 Channels 2HDDs WizSense Network Video Recorder Model: NVR5232-EI
		Support 2-ch HDMI, 1-ch VGA, HDMI2 at up to 4K (3840x2160) resolution		1VGA, 1 HDMI VGA: 1920x1080, 1280x1024, 1280x720 HDMI:3840x2160, 1920x1080, 1280x1024, 1280x720 Heterogeneous video source output for HDMI and V	➢ Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format. ➢ Max. Decoding capability: 32 x 1080p@30 fps or 16-x 4MP@30 fps. ➢ Max. 384 Mbps incoming/recording/outgoing bandwidth.
		Up to 12 Megapixel resolution recording		Up to 12MP Resolution for preview and Playback	➢ Support AcuPick with Max, 16-Channel. ➢ Support N+M cluster. ➢ AI by recorder: 2-channel face detection and recognition, 4-channel perimeter protection, and recognition, perimeter protection, SMD plus, metadata, ANPR, stereo analysis, heat map, and people counting.
		Support H.265 video formats		Support H.265 video formats	➢ Security baseline 2.3
		2 SATA HDDs, up to 4 TB for each HDD support		4 SATA III ports, up to 8 TB capacity for each HDD	
		Support various VCA detection alarm and VCA search		Support various VCA detection alarm and VCA search	
		Support for P2P, UPnP, NTP, DHCP, PPPoE		Support for P2P, UPnP, NTP, DHCP, PPPoE	
4	LED	Smart TV LED (SONY/SAMSUNG/LG)	02	LG C3 48 Inch OLED screen	➢ "43" UHD LED Monitor, 4K Ultra-HD resolution, Built-in 3D COMB filter and 3D noise reduction, 8.5ms response time for no motion blur, judder or ghosting, 1.07G colors, for a realistic and immersive visual experience, High fidelity digital processing for a brilliant and vivid video, 178º /178ºextra-wide viewing angle for overall viewing performance, Professional thermal design to extend angle for overall viewing performance, Professional
		Screen display 40 inch		Screen display 48 inch	
		4K (UHD) - 2160p, or 3840 x 2160 pixels		4K (UHD) - 2160p, or 3840 x 2160 pixels	
		HDR, OLED		HDR	
		Dual screen		N/A	
		OLED with viewing angle upto 85 degree		OLED with viewing angle upto 85 degree	

					thermal design to extend equipment lifespan, Built-in power, low energy consumption"
5	UPS	2Kva with Dry Battery upto 150 AH (Exide or Volta), 100 watts rated output, 3 to 4 hours recharge time, 1 Hour backup time	01	UPS 2KVA Deluxe Optima 2000 with 2 X 150AH dry Battery	2 KVA Online UPS with 2 X 100AH Dry Battery
6	NETWORKING	Complete networking solution for the proposed mode of communication with Optical fibre and Cat-6 (Quote with Fiber Network including Switches, Module, Outdoor/Indoor cabinet etc.)	01	Local Complete	4-Port PoE Managed Switch Model: PFS4206-4P-96
		Proper power sockets with an weather proof security box for POE's and other equipment to keep all the supporting items like POE's, switches etc.		Local	➢ Layer 2 managed PoE switch ➢ MAC auto study and aging, MAC address list capacity is 8k ➢ Support IEEE802.3at, Hi-PoE standard ➢ Support RSTP ➢ Industrial wide temperature design ➢ PoE Management
		Good strength poles for the deployment of cameras.		-	Payment: As per Tender Terms. Delivery Period: : As per Tender Terms.
		Underground cabling where required, Proper ducting where required		-	Installation: : As per Tender Terms.
		Proper power provisioning for each pole to provide electric power.		-	Validity: : As per Tender Terms. Delivery Location: Free Delivery at Consignee.
		Warranty: 2 year's parts and 3 years' service.		-	Warranty One year warranty or as per the Tender Terms
		All participating vendors/bidders must be registered with Pakistan Engineering Council with field of Specialization, EE02 under relevant class for the year 2023/24. All Bidders must visit office for pre-bid meeting/ consultation for correct bidding.		-	
		Note: Wiring with all relevant material must be provided by the vender.		-	
		Quote Complete wiring package with detail qty and P/RFT cost.		-	

Bids offered by both firms have been evaluated. M/s EGS does not comply with Technical Specs and hence rejected.
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Specifications - CCTV System including 09x IP Cameras, 2 x PTZ Dome Camera and 32 Channel NVR With All Req Accessories

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		Resolution : 3072 x 2048, Max 25fps		8MP (3840 x 2160) @ 15 fps, and supports 2688x1520 (2688x1520) @ 25/30fps	➢ 8-MP 1/2.7" CMOS image sensor, low luminance, and high-definition image
		POE (power over Ethernet) Network camera		POE	➢ Outputs max. 8 MP (3840 x 2160) @ 20fps, and supports 2688 x 1520 (2688 x 1520) @ 25/30 fps
		HLC (Highlight Compensation) & BLC (Backlight Compensation) supported		HLC/BLC	➢ H.265 codec, high compression rate, ultra-low bit rate.
		Water proof, Privacy mask, Motion Detection, Digital Defog		Water proof, Privacy mask, Motion Detection, Digital Defog	➢ Built-in IR LED and the max. Illumination distance is 30m.
		Face detection, People counting, Tempering Alarm		Face detection, People counting, Tempering Alarm	➢ ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
		Day/night functionality		Day/night functionality	
		1/3″ progressive scan, CMOS		1/2.7″ 8Megapixel progressive CMOS	➢ Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
		Smart IR up to 30M IR distance		Smart IR up to 80M IR distance	
		2D/3D DNR (Digital noise reduction)		2D/3D DNR (Digital noise reduction)	➢ Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
		Optical Glass Window, IR anti-reflection window		Optical Glass Window, IR anti-reflection window	
		Ultra 265, MJPEG, ONVIF Conformance		Ultra 265, MJPEG, ONVIF Conformance	➢ Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
		Multiple Stream		Multiple Stream	
		IP 67 or IP 68 Dustproof		IP 67	➢ Supports max. 256 G Micro SD

					• card; built in MIC ➤ 12VDC/Poe power supply ➤ IP67 protection ➤ SMD Plus
2	NETWORK PTZ DOME CAMERA	4 MP Progressive scan HD up to 1920 × 1080 resolution	01	1/1.8" 4-Megapixel CMOS progressive scan, 2560 x 1440 resolution	DAHUA TECH 4MP 25x Starlight IR Network PTZ Camera SD49425GB-HNR
		Smart IR up to 100M IR distance		Smart IR up to 150M IR distance	➤ 1/2.8" STARVIS™ CMOS
		30 X Optical Zoom		25 X Optical Zoom	➤ 25x optical zoom
		Multiple stream, Micro SD up to 64 GB		Multiple stream, Micro SD card (512 GB); FTP/SFTP; NAS	➤ Starlight Technology ➤ Max. 25/30fps@4M
		Digital Zoom Supported		Digital Zoom Supported	➤ IR distance up to 100m
		IP 66 or 67		IP67, IK10, TVS 6000 V lightning proof; surge protection; voltage transient protection	➤ Perimeter protection ➤ Face detection ➤ SMD 4.0. ➤ IP66
		POE Network camera. HLC and BLC supported		POE, HLC/BLC	
		Water proof, Privacy mask, Motion Detection, Digital Defog		Water proof, Privacy mask, Motion Detection, Digital Defog	
		Face detection, People counting, Tempering Alarm		Face detection, People counting, Tempering Alarm	
		Day/night functionality		Day/night functionality	
		2D/3D DNR (Digital noise reduction)		2D/3D DNR (Digital noise reduction)	
		Optical Glass Window, IR anti-reflection window		Optical Glass Window, IR anti-reflection window	
		Ultra 265, MJPEG, ONVIF Conformance		Ultra 265, MJPEG, ONVIF Conformance	
3	NVR	32 channel NVR with 20-25 days recording capacity	01	DAHUA (DHI-NVR5432-4KS2) 32 Channel 1.5U 4K&H.265 pro, 4HDD, 320Mbps, NVR 4K NVR, Up to 32 channel IP cameras can be connected.	32 Channels 2HDDs Wiz Sense Network Video Recorder Model: NVR5232-EI
		Support 2-ch HDMI, 1-ch VGA, HDMI2 at up to 4K (3840x2160) resolution		1VGA, 2 HDMI VGA: 1920x1080, 1280x1024, 1280x720 HDMI:3840x2160, 1920x1080, 1280x1024, 1280x720 Heterogeneous video source output for HDMI and V	➤ Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format ➤ Max. decoding capability: 32 x 1080p @30fps or 16x4MP@30fps
		Up to 12 Megapixel resolution recording		Up to 12MP Resolution for preview and Playback	➤ Max. 384 Mbps incoming/recording/outgoing bandwidth
		Support H.265 video formats		Support H.265 video formats	➤ Support AcuPick with Max. 16-Channel.
		4 SATA HDDs, up to 8 TB for each HDD support		4 SATA III ports, up to 8 TB capacity for each HDD	➤ Support N+M cluster
		Support various VCA detection alarm and VCA search		Support various VCA detection alarm and VCA search	➤ AI by recorder: 2-channel face detection and recognition, 4-
		Support for P2P, UPnP, NTP, DHCP, PPPoE		Support for P2P, UPnP, NTP, DHCP, PPPoE	

					channel perimeter protection, and 8-channel SMD Plus. ➢ AI by camera: Face detection and recognition, perimeter protection, SMD Plus, metadata, ANPR, Stereo analysis, heat map and people counting ➢ Security baseline 2.3
4	LED	Smart TV LED (SONY/SAMSUNG/LG)	02	LG C3 48 Inch OLED screen	43" UHD LED Monitor, 4K Ultra-Hd resolution, Built-in 3D COMB filter and 3D noise reduction, 8.5ms response time for no motion blur, judder or ghosting, 1.07G colors, for a realistic and immersive visual experience, High fidelity digital processing for a brilliant and vivid video, 178º /178ºextra-wide viewing angle for overall viewing performance, Professional thermal design to extend equipment lifespan, Built-in power, low energy consumption.
		Screen display 40 inch		Screen display 48 inch	
		4K (UHD) - 2160p, or 3840 x 2160 pixels		4K (UHD) - 2160p, or 3840 x 2160 pixels	
		HDR		HDR	
		Dual screen		N/A	
		OLED with viewing angle upto 85 degree		OLED with viewing angle upto 85 degree	
5	UPS	2Kva with Dry Battery upto 150 AH (Exide or Volta), 100 watts rated output, 3 to 4 hours recharge time, 1 Hour backup time	01	UPS 2KVA Deluxe Optima 2000 with 2 X 150AH dry Battery	2KVA online UPS with 2 x 100AH Dry Battery
6	NETWORKING	Complete networking solution for the proposed mode of communication with Optical fibre and Cat-6 (Quote with Fiber Network including Switches, Module, Outdoor/Indoor cabinet etc.)	01	Local Complete	4-Port PoE Managed Switch Model: PFS4206-4P-96 ➢ Layer 2 managed PoE switch ➢ MAC auto study and aging, MAC address list capacity is 8K ➢ Support IEEE802.3af, IEEE802.3at, Hi-PoE standard ➢ Support TSRP ➢ Industrial wide temperature design ➢ PoE Management. ➢ Warranty One year warranty or as per the Tender Terms.
		Proper power sockets with an weather proof security box for POE's and other equipment to keep all the supporting items like POE's, switches etc.		Local	
		Good strength poles for the deployment of cameras.		-	
		Underground cabling where required, Proper ducting where required		-	
		Proper power provisioning for each pole to provide electric power.		-	
		Warranty: 2 year's parts and 3 years' service.		-	
		All participating vendors/bidders must be registered with Pakistan Engineering Council with field of Specialization, EE02 under relevant class for the year 2023/24. All		-	

		Bidders must visit office for pre-bid meeting/ consultation for correct bidding.			
		Note:	Wiring with all relevant material must be provided by the vender.	-	
			Quote Complete wiring package with detail qty and P/RFT cost.	-	

Bids offered by both firms have been evaluated. M/s EGS does not comply with Technical Specs and hence rejected. Whereas, M/s Vital International meets technical specifications and is recommended for further necessary action, please.

SPECIFICATION OF "CCTV SYSTEM NVR WITH 06 X IP CAMERAS"

Sr.	Peripherals/Functions	Specifications	M/s egs	M/s Vital International Ltd
1	Brand	Renowned Brand commonly used in Pakistan	DAHUA	DAHUA DH-IPC-HFW1439TL1-A-IL 4MP Smart Dual Light Network Camera • 4MP Snart Dual Light Bullet Network Camera • IR Illumination Distance is 30 meter • Warm light distance is 30 meter • Built-in MIC 16CH compact 1U HDD Wiz Sense Network video recorder Model NVR4116HS-EI ➢ Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format ➢ Access, storage or forwarding at 256Mbps (180 Mbps when AI function enabled) ➢ Max. Decoding capability: 16-x 1080p@30fps. Supports adaptive decoding ➢ AI by NVR: 1-channel face detection and recognition; 2-channel perimeter protection; up to 10 face databases and 20,000 face images; 4-channel SMD Plus ➢ AI by Camera: Face detection and recognition, perimeter protection; SMD Plus; people counting; stereo analysis; heat map. ➢ Connected to the third-party network cameras ➢ Security bassline 2.3 ➢ Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format ➢ Max. Decoding capability: 32 x
	6IP Camera	4 MP or Higher each with full color	DAHUA (DH-IPCHFW143S1LEDS4) 4MP Bullet Full-Color Fixed-Focal Bullet Network Camera	
3	NVR 16 Channel	Hybrid NVR with HD resolution	Dahua (DHI-NVR5216-EI) 16 Channels 1U 2HDDs WizSense AI NVR	
4	HDD	8TB	Western Digital PURPLE 8 TB Hard Drive	
5	Cable for connectivity	3M Cat 6 STP	Digitus CAT 6 STP Cable	
6	Power Requirements	lnput voltage (auto rang Ving): 240 VAC (± 10%), 50/60 Hz, 5 A max, or Pakistan Compatible	DAHUA POE switch	
7	LED 50 Inch	5 Series, Res 1920x1080	Samsung (Original) 50" 50B8000 Android TV, LED 4K Smart TV, 3840x2160	
8	Warranty	01 Year on-site comprehensive	1-Year	
9	Dealership	Authorized Dealership with OEM certification	N/A	
10	Installation and configuration with existing system and training		Complete	

			1080p@30fps or 16-x 4MP@30fps
			➢ Max. 384 Mbps incoming/recording/outgoing bandwidth
			➢ Support AcuPick with Max. 16-Channel
			➢ Support N+M cluster
			➢ AI by recorder: 2-channel face detection and recognition, 4-channel perimeter protection, and 8-channel SMD Plus
			➢ AL by camera: Face detection and recognition, perimeter protection, SMD Plus, metadata, ANPR, Stereo analysis, heat map and people counting
			➢ Security baseline 2.3
			8 Port Switch with 8-Port Poe Model: PFS3110-8ET-96 Layer 2 Hardened PoE Switch, 96 Watts, 1*1000 Base-X + 1*10/100/1000 Base-T + 8*10/100 Base-T POE
			LED 50 inch
			Supply & installation of CAT-6 Network Cable in PVC Pipe/Duct/Conduit including the RK-45 connectors.
			Payment: As per Tender Terms. Delivery Period: : As per Tender Terms. Installation: : As per Tender Terms. Validity: : As per Tender Terms. Delivery Location: Free Delivery at Consignee. Warranty One year warranty or as per the Tender Terms.

Bids offered by both firms have been evaluated. M/s EGS does not comply with Technical Specs and hence rejected. Whereas, M/s Vital International meets technical specifications and is recommended for further necessary action, please.

Tents				M/s Bisma Enterprises
1	Tent Class	J	Double ply & ==double== fly Tent inside measuring 8 ft wide and ==11== ft long made out of 400 to 600 g/m^2 100% Cotton Canvas rot & water proof & fireproof (Optional). The tent has 3 ft high side walls. Tent has a height of 8 ft at the center with 2 x 3 in dia & 10 ft long bamboo vertical supports at edges and 1 x 3 in dia & 11 ft long horizontal support on top of two long vertical supports. Vertical supports must have 3/8 to ½ in dia steel pins projecting out by 5 inches for tightening ropes.

 The horizontal support must have round shaped steel connectors at both ends and having 2-inch dia, 2 mm thickness with ½ inch dia hole at the center to receive vertical post pin. On two shorter sides, the tent should have openable qannat panels, conforming to the shape of opening. A blue or brown inner layer made up of cotton cloth should be fixed to enhance interior of the tent. At rear end of tent there should be double ply but single fly semicircular attached partition (for bath or cooking) some 3.5 ft wide at center. Inside tent should have Cotton Canvas rot & water proof & fireproof (Optional) daree Tent package must include ==22== steel pegs each measuring 15 inches long and ½ dia with hooks at one end and point edge at the other end. There should be 15 small pegs measuring 6-inch length with 3/8-inch dia with hook at one end and pointed end at other side.
The tent should durable and good in wind and outdoor camping conditions. It should be easy setup in all weather, easy to take down, easy to roll up.
Tent should be with all parts mentioned above along 1 x ½ kg hammer and complete in all respects. | Double ply & ==single== fly Tent inside measuring 8 ft wide and ==8== ft long made out of 400 to 600 g/m^2 100% Cotton Canvas rot & water proof & fireproof (Optional). The tent has 3 ft high side walls. Tent has a height of 8 ft at the center with 2 x 3 in dia & 10 ft long bamboo vertical supports at edges and 1 x 3 in dia & 11 ft long horizontal support on top of two long vertical supports. Vertical supports must have 3/8 to ½ in dia steel pins projecting out by 5 inches for tightening Ropes.

The horizontal support must have round shaped steel connectors at both ends and having 2-inch dia, 2 mm thickness with ½ inch dia hole at the center to receive vertical post pin. On two shorter sides, the tent should have openable qannat panels, conforming to the shape of opening. A blue or brown inner layer made up of cotton cloth should be fixed to enhance interior of the tent. At rear end of tent there should be double ply but single fly semicircular attached partition (for bath or cooking) some 3.5 ft wide at center. Inside tent should have Cotton Canvas rot & water proof & fireproof (Optional) daree
 Tent package must include ==14== steel pegs each measuring 15 inches long and ½ dia with hooks at one end and point edge at the other end. There should be 15 small pegs measuring 6-inch length with 3/8-inch dia with hook at one end and pointed end at other side.

The tent should durable and good in wind and outdoor camping conditions. It should be easy setup in all weather, easy to take down, easy to roll up.
Tent should be with all parts mentioned above along 1 x ½ kg hammer and complete in all respects. |

			Warranty: - 3 years from the date of inspection	
2	Tent Class	F	Double ply & single fly Tent inside measuring 8 ft wide and 8 ft long made out of 400 to 600 g/m^2 100% Cotton Canvas rot & water proof & fireproof (Optional). The tent has 1 ft high side walls. Tent has a height of 8 ft at the center with 2 x 3 in dia & 10 ft long bamboo vertical supports at edges and 1 x 3 in dia & 11 ft long horizontal support on top of two long vertical supports. Vertical supports must have 3/8 to ½ in dia steel pins projecting out by 5 inches for tightening ropes. The horizontal support must have round shaped steel connectors at both ends and having 2-inch dia, 2 mm thickness with ½ inch dia hole at the center to receive vertical post pin. On two shorter sides, the tent should have openable qannat panels, conforming to the shape of opening. A blue or brown inner layer made up of cotton cloth should be fixed to enhance interior of the tent. At rear end of tent there should be double ply but single fly semicircular attached partition (for bath or cooking) some 3.5 ft wide at center. Inside tent should have Cotton Canvas rot & water proof & fireproof (Optional) daree Tent package must include 14 steel pegs each measuring 15 inches long and ½ dia with hooks at one end and point edge at the other end. There should be 15 small pegs measuring 6-inch length with 3/8-inch dia with hook at one end and pointed end at other side. The tent should durable and good in wind and outdoor camping conditions. It should be easy setup in all weather, easy to take down, easy to roll up. Tent should be with all parts mentioned above along 1 x ½ kg hammer and complete in all respects.	Double ply & double fly Tent inside measuring 8 ft wide and 11 ft long made out of 400 to 600 g/m^2 100% Cotton Canvas rot & water proof & fireproof (Optional). The tent has 3 ft high side walls. Tent has a height of 8 ft at the center with 2 x 3 in dia & 10 ft long bamboo vertical supports at edges and 1 x 3 in dia & 11 ft long horizontal support on top of two long vertical supports. Vertical supports must have 3/8 to ½ in dia steel pins projecting out by 5 inches for tightening ropes. The horizontal support must have round shaped steel connectors at both ends and having 2-inch dia, 2 mm thickness with ½ inch dia hole at the center to receive vertical post pin. On two shorter sides, the tent should have openable qannat panels, conforming to the shape of opening. A blue or brown inner layer made up of cotton cloth should be fixed to enhance interior of the tent. At rear end of tent there should be double ply but single fly semicircular attached partition (for bath or cooking) some 3.5 ft wide at center. Inside tent should have Cotton Canvas rot & water proof & fireproof (Optional) daree Tent package must include 22 steel pegs each measuring 15 inches long and ½ dia with hooks at one end and point edge at the other end. There should be 15 small pegs measuring 6-inch length with 3/8-inch dia with hook at one end and pointed end at other side. The tent should durable and good in wind and outdoor camping conditions. It should be easy setup in all weather, easy to take down, easy to roll up. Tent should be with all parts mentioned above along 1 x ½ kg hammer and complete in all respects.

		Warranty: - 3 years from the date of inspection	
3	PT	Wooden board made up of seasoned Diyar wood measuring 750 mm x 600 mm with 20 mm thickness with 2 x braces measuring 300 mm x 580 mm with 25 mm thickness made from seasoned Diyar wood. Having 190 mm diameter round base plate having 7 mm thickness made of steel/sliver securely screwed up with 2 mm thick and 60 mm outer dia flange and 25 mm outer dia (& 15 mm inner dia) and 15 mm projecting threaded brass socket for bolting stand. All complete as per sample.	Wooden board made up of seasoned Diyar wood measuring 750 mm x 600 mm with 20 mm thickness with 2 x braces measuring 300 mm x 580 mm with 25 mm thickness made from seasoned Diyar wood. Having 190 mm diameter round base plate having 7 mm thickness made of steel/sliver securely screwed up with 2 mm thick and 60 mm outer dia flange and 25 mm outer dia (& 15 mm inner dia) and 15 mm projecting threaded brass socket for bolting stand. All complete as per sample.
4	PT Stand	Wooden PT Stand / tripod made up of seasoned Diyar wood and having 3 equal-sized and length legs and each following sepcs: • Length/height – 1200 mm • 2 x 30 mm x 15 mm wooden pieces • 1 x 120 mm long & 18 mm thick trapezoidal wooden brace at the center having 45 mm up-per width at one end and 35 mm lower width at the other end. • 65 mm long 25 mm wide & 1.5 mm thick pointed steel shoe at bottom projecting out by 25 mm. • 1 x 160 mm long bolt made up of brass having 5 mm thickness and 40 cm long threads on both ends and with 2 x 35 mm wide & 2 mm thick but-terfly nets for both ends. • Edges must be beveled. • All complete as per sampl;e. PT Stand Top Support: PT Stand top triangular support made of seasoned Diyar wood with following dimensions:	Wooden PT Stand / tripod made up of seasoned Diyar wood and having 3 equal-sized and length legs and each following sepcs: • Length/height – 1200 mm • 2 x 30 mm x 15 mm wooden pieces • 1 x 120 mm long & 18 mm thick trapezoidal wooden brace at the center having 45 mm upper width at one end and 35 mm lower width at the other end. • 65 mm long 25 mm wide & 1.5 mm thick pointed steel shoe at bottom projecting out by 25 mm. • 1 x 160 mm long bolt made up of brass having 5 mm thickness and 40 cm long threads on both ends and with 2 x 35 mm wide & 2 mm thick butterfly nets for both ends. • Edges must be beveled. • All complete as per sampl;e. PT Stand Top Support: PT Stand top triangular support made of seasoned Diyar wood with following dimensions: • Each projecting piece measuring 70 mm x 50 mm (thick).

		• Each projecting piece measuring 70 mm x 50 mm (thick). • 2 x co-centric holes at center. Outer hole having 52 mm dia with 4 mm depth, whereas, inner having 27 mm dia with 46 mm depth (going through & through) for securing stand bold into PT Base Plate. • Stand bolt made up of brass having 60 mm length and 15 mm thickness with 20 mm long threads and having 65 mm wide & 6 mm thick butterfly bolt head far easy operation. All complete as sample.	• 2 x co-centric holes at center. Outer hole having 52 mm dia with 4 mm depth, whereas, inner having 27 mm dia with 46 mm depth (going through & through) for securing stand bold into PT Base Plate. • Stand bolt made up of brass having 60 mm length and 15 mm thickness with 20 mm long threads and having 65 mm wide & 6 mm thick butterfly bolt head far easy operation. All complete as sample.
5	Sight Rule	Wooden sight Rule made up from seasoned Diyar wood with 76 mm length, 18 mm thickness and having 45 mm width at bottom and 30 mm width at the top. 1 x sight at one end made up of brass and measuring 19 mm wide, 100 mm high with 70 mm long beveled 0.5 mm wide slit along the center and 1 x 1 mm size hole at the top to tie string. 1 x sight at other end made up of brass and measuring 19 mm wide, 100 mm high with 70 mm long 10 mm wide opening and 2 x 1 mm size holes at the top & bottom to tie string The sight should have 45 mm long and 18 mm wide 5 mm thick with 2 mm deep cut at center base for securely fixing the sight onto the sight rule with help of screws. A 35 mm long diagonal U-shaped support tightened with sight rule with help of screws/nuts.	Wooden sight Rule made up from seasoned Diyar wood with 76 mm length, 18 mm thickness and having 45 mm width at bottom and 30 mm width at the top. 1 x sight at one end made up of brass and measuring 19 mm wide, 100 mm high with 70 mm long beveled 0.5 mm wide slit along the center and 1 x 1 mm size hole at the top to tie string. 1 x sight at other end made up of brass and measuring 19 mm wide, 100 mm high with 70 mm long 10 mm wide opening and 2 x 1 mm size holes at the top & bottom to tie string The sight should have 45 mm long and 18 mm wide 5 mm thick with 2 mm deep cut at center base for securely fixing the sight onto the sight rule with help of screws. A 35 mm long diagonal U-shaped support tightened with sight rule with help of screws/nuts.
6	Warranty	2 years.	2 years

Bid offered by M/s Bisma Enterprises meets technical specifications and is recommended for further necessary action, please.