

Technical Specifications

Item	Specification	Statement of Compliance
		<p>Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of ITB Clause 3.1(a)(ii) and/or GCC Clause 2.1(a)(ii).</p>
Item No.	Description	Quantity
1	<p>Supply, Installation, Commissioning & Testing of Security Surveillance Camera System for CCTV Camera at the Water Treatment Plant</p> <p>Minimum Specifications:</p> <p>1. Network Video Recorder – 1 unit</p> <p>Monitor: 23.6” LCD Monitor</p> <p>SYSTEM UNIT</p> <p>-Form Factor: 2U rack-mounted</p> <p>-Processor: quad-core processor</p> <p>-Operating System: Embedded LINUX</p> <p>-Audio and Video IP Camera Input: 64 Channel Two-way Talk: 1 Channel Input, 1 Channel Output, RCA</p> <p>-Display Interface: 2 HDMI, 1 VGA On Screen Display: Camera title, Time, Video loss,</p>	



	Camera lock, Motion detection, Recording		
	<p>-Recording</p> <p>Compression: H.265, H.264, MJPEG</p> <p>Resolution: 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P</p> <p>Record Rate: 384 Mbps</p> <p>Bit Rate: 16Kbps ~ 20Mbps Per Channel</p> <p>Record Mode: Manual, Schedule (Regular, (Motion Detection), Alarm, Intelligent Video System),</p> <p>Record Interval: 1 ~ 120 min. (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec</p>		
	<p>-Playback and Backup</p> <p>Playback: 128 Mbps in Raid 5 Mode; 64 Mbps in single HDD Mode</p> <p>Search Mode: Time/Date, Alarm and Exact Search (accurate to second)</p> <p>Playback Function: Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom</p> <p>Backup Mode: USB Device/Network/eSATA Device</p>		
	<p>-Network</p> <p>Interface: 2 RJ-45 Ports (10/100/1000Mbps)</p> <p>Ethernet Port: 2 Ethernet Ports Joint Working or 2 Independent 1000Mbps Ethernet Ports</p> <p>Network Function: HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search</p> <p>Max. User Access: 128 users</p> <p>Interoperability: ONVIF 2.4, CGI Conformant</p>		
	<p>-Storage</p> <p>Internal HDD: 8 SATA III Ports, Up to 8 TB capacity for each HDD</p> <p>HDD Mode: Single, Raid 0,1,5,6,10, Support Global HDD Hot-spare</p> <p>Capacity: 4TB 3.5" HDD Surveillance x 4 units</p>		
	2. Monitoring PC Server – 1 unit		
	<p>CPU</p> <ul style="list-style-type: none"> • Frequency: 3.9GHz • Architecture: 64bit • Number of Cores: 2 Cores 		
	RAM Size: 8GB		
	<p>Hard Drive Size & Type:</p> <p>SATA III 120GB SSD x 1</p> <p>SATA III 2TB 3.5" HDD x 1</p>		
	Video Card (Separate from motherboard): 2GB RAM, 128 bit DVI HDMI, PCI-E		
	Optical Drive: Optical Disc Drive 24x CD/DVD/RW		
	Monitor: 43" LED UHD TV		
	Motherboard Back Panel Connectors: At least USB 2.0, Audio In & Out, Gigabit network adapter		
	Operating System: Windows 10 Licensed Professional (64-bit)		
	Power Supply: 600Watts, True Rated 80plus		
	<p>Accessories: 10 Meters Ultra-High-Speed HDMI 2.0 Cable, USB Optical Mouse w/ scroll, USB Keyboard</p>		
	3. 3000VA Inverter – 1 unit		
	Rated Power: 3000VA/2400W		
	<p>INPUT</p> <p>Nominal Voltage: 230VAC</p> <p>Frequency range: 50Hz/60Hz (auto sensing)</p>		
	<p>OUTPUT</p> <p>AC Voltage Regulation (Batt. Mode): 230 VAC +/- 5%</p> <p>Waveform: Pure sine wave</p>		

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	Surge Power: 6000VA Efficiency (Peak): 90%~93%		
	BATTERY Battery Voltage: 24VDC Floating Charge Voltage: 27VDC Overcharge Protection: 32VDC Battery Type: 2 units of 12V 100AH		
	4. 1100VA UPS – 1 unit		
	Rated Power: 1100VA/605W		
	SYSTEM UPS System: Line Interactive UPS with Stabilizer Control System: Microprocessor 8 bit		
	LOAD APPLICATION Input Voltage: 220 VAC +/- 20% Voltage Battery Mode: 220 VAC Voltage AC mode: 220 VAC +/- 10%		
	OUTPUT OUTLET Number of backup outlets: 5 Number of surge protected outlet: 1		
	BATTERY Type: Sealed lead acid (Maintenance free) Capacity: 2 x 2V 7AH		
	5. Network Cables		
	Cat6 FTP Outdoor Cable 23AWG: 4 Rolls		
	Cat 6 UTP Cable 23AWG – 1 Roll		
	6. Connectors		
	Cat6 shielded RJ45 Connector: 66 pcs.		
	Rubber Boot: 66 pcs.		
	Patchcord Cat6 UTP Cable 1 meter: 24 pcs.		
	Terminal Box 1 Gang: 3 pcs.		
	Terminal Box 8 gang: 2 pcs.		
	Keystone Jack Cat5e Shielded: 18 pcs.		
	Keystone Jack Cat6: 19 pcs.		
	7. Ethernet Surge Protector – 14 pcs.		
	Interface Connections: 2 RJ45 female Connectors		
	ESD/EMP Protection: Absorbing Transient Current with Response to Surge Voltage from 100V/s to 1KV/ μ s DC spark-over voltage: 90V @ 100V/s		
	Maximum Impulse Spark-Over Voltage: 700V @ 1KV/ μ s		
	Discharge Current: 5kA (Maximum), 0.5kA (Normal)		
	Maximum Capacitance: 1.0 pF @ 1MHz		
	Data Line Protection: RJ45 10/100/1000 Ethernet		
	IEEE 802.3af Support		
	8. 3MP Bullet IP Camera – 13 units		
	CAMERA Image Sensor: 1/2.8" 3Megapixel progressive scan CMOS Effective Pixels: 2048(H)x1536(V) RAM/ROM: 1024MB/128MB Scanning System: Progressive Minimum Illumination: 0.005Lux/F1.4 (Color, 1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)		

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	<p>IR Distance: Distance up to 50m(164ft) IR On/Off Control: Auto/Manual IR LEDs: 4</p>		
	<p>LENS Lens Type: Motorized/Auto Iris Mount Type: Board-in Focal Length: 2.7~13.5mm motorized Max. Aperture: F1.4 Angle of View: H: 101°~31°, V:54°~17° Optical Zoom: 5x Focus Control: Motorized Close Focus Distance: 0.3m(0.98ft)</p>		
	<p>PAN/TILT/ROTATION: Pan:0° ~360°; Tilt: 0° ~90°; Rotation: 0°~360°</p>		
	<p>INTELLIGENCE Intelligent Video System: Tripwire, Intrusion, Object Abandoned/Missing Advanced Intelligent Functions: Face Detection, People Counting, Heat Map</p>		
	<p>VIDEO Compression: H.265+,H.265,H.264+,H.264 Streaming Capability: 3 Streams</p> <p>Frame Rate: Main Stream: 3M(1~50/60fps) Sub Stream: D1 (1~50/60fps) Third Stream: 1080P(1~50/60fps)</p> <p>Day/Night: Auto(ICR), Color, B/W BLC Mode: BLC,HLC,WDR(140dB) White Balance: Auto/Natural/Street Lamp/ Outdoor/Manual Flip: 0° /90° /180° /270° Privacy Masking: Off/ On (4 Area, Rectangle)</p>		
	<p>NETWORK</p>		
	<p>-Ethernet: RJ-45 (100/1000Base-T) Protocol: HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6 Interoperability: ONVIF, PSIA, CGI Streaming Method: Unicast/Multicast</p>		
	<p>-Interface Video Interface: 1 Port(For adjustment only) Audio Interface: 1/1 channel In/Out</p> <p>Alarm: 2 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC</p>		
	<p>STANDARDS Ingress Protection: IP67 Vandal Resistance: IK10</p>		
	<p>9. 3MP Dome IP Camera – 1 unit</p>		
	<p>CAMERA Image Sensor: 1/2.8"3Megapixel progressive scan CMOS Effective Pixels: 2048(H)x1536(V) RAM/ROM: 1024MB/128MB Scanning System: Progressive</p> <p>Minimum Illumination: 0.005Lux/F1.4 (Color, 1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)</p> <p>IR Distance: Distance up to 50m(164ft) IR On/Off Control: Auto/Manual IR LEDs: 4</p>		
	<p>LENS Lens Type: Motorized/Auto Iris Mount Type: Board-in</p>		

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	<p>Focal Length: 2.7~13.5mm motorized Max. Aperture: F1.4 Angle of View: H: 101°~31°, V:54°~17° Optical Zoom: 5x Focus Control: Motorized Close Focus Distance: 0.3m(0.98ft)</p>		
	<p>PAN/TILT/ROTATION: Pan:0° ~355°; Tilt: 0° ~65°; Rotation: 0°~355°</p>		
	<p>INTELLIGENCE IVS: Tripwire, Intrusion, Object Abandoned/ Missing Advanced Intelligent Functions: Face Detection, People Counting, Heat Map</p>		
	<p>VIDEO Compression: H.265+,H.265,H.264+,H.264 Streaming Capability: 3 Streams</p> <p>Frame Rate: Main Stream: 3M(1~50/60fps) Sub Stream: D1 (1~50/60fps) Third Stream: 1080P(1~50/60fps)</p> <p>Day/Night: Auto(ICR), Color, B/W BLC Mode: BLC, HLC, WDR(140dB) White Balance: Auto/Natural/Street Lamp/ Outdoor/Manual Flip: 0° /90° /180° /270° Privacy Masking: Off/ On (4 Area, Rectangle)</p>		
	<p>NETWORK</p>		
	<p>-Ethernet: RJ-45 (100/1000Base-T) Protocol: HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6 Interoperability: ONVIF, PSIA, CGI Streaming Method: Unicast/Multicast</p>		
	<p>-Interface Video Interface: 1 Port(For adjustment only) Audio Interface: 1/1 channel In/Out</p> <p>Alarm: 1 channel In: 5mA 5VDC 1 channel Out: 1A 30VDC / 0.5A 50VAC</p>		
	<p>STANDARDS Ingress Protection: IP67 Vandal Resistance: IK10</p>		
	<p>10. 4 Ports HPoE Switch with Gigabit Uplink – 4 units</p>		
	<p>POWER Power Supply Type: Power Adapter Power Adapter Voltage: DC48V-57V</p>		
	<p>NETWORK CONNECTOR Network Port: 1~4 ports of PoE switch support IEEE802.3af/at Uplink port: 10/100/1000Mbps Ethernet port SFP:1000Mbps optical fiber SFP module port</p> <p>Transmission Distance: 1-4 port: 100m Transmission Medium: Cat5/5e/6 standard network cable PoE protocol: IEEE802.3af/at</p>		
	<p>NETWORK SWITCH Package Buffer: 1M MAC address list: 8k</p>		
	<p>LED STATUS INDICATOR Power Indicator: 2 Optical port LED indicator: 2 fiber link green lights indicate fiber working status Uplink Ethernet port LED indicator: RJ45 port indicates network working status</p>		
	<p>11. 5 ports Smart Gigabit switch – 1 unit</p>		

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CPU Nominal frequency: 880MHz		
10/100/1000 Ethernet ports: 5 ports		
Max Power consumption: 5W		
Number of USB ports: 1 port		
PoE in: 1 port		
Power Jack: 1 port		
Supported input voltage: 6V – 31V		
Storage type: Flash		
Storage size: 256MB		
12. 24 ports Smart Gigabit Switch – 1 unit		
CPU frequency: 600MHz		
CPU core count: 1 core		
Size of RAM: 128MB		
No. of Ethernet ports: 24 ports of 10/100/1000mbps		
No. of USB ports: 1 port		
Supported input voltage: 8V – 28V		
No. of PoE in.: 1 port		
No. of SFP ports: 1 port		
Serial ports: RJ45		
Storage type: NAND		
Storage size: 128MB		
13. Server Data Cabinet (Floor Standing Cabinet 32U) – 1 set		
SPECIFICATIONS		
Material: cold rolled steel		
Loading Capacity: Static loading 800kg		
Degree of protection: IP20		
ACCESSORIES		
Horizontal Wire Management with cover 2U: 1unit		
Universal PDU 19 inches 1U 6 ways: 1 unit		
1U Cantilever Shelf: 1 unit		
Modular Patch Panel: 1 unit		
14. Outdoor Cabinet – 2 units		
Enclosure Type: Wallmount Outdoor Enclosure		
Dimension: 14" W x 8" D x 16" H		
Door Type: Swing-out front door with TEE Lock		
15. Installation and Other Materials		
Guy Wire ¼		
T.W. Solid Wire		
PDX wire		
2 Gang outlets 3 slots universal		
Ground Rod		
Galvanized Grounding Clamp		

	Male Plug		
	Electrical Tape		
	GI Wire		
	Turn Buckle		
	Porcelain Wire Holder		
	Spaghetti tube		
	Grab adhesive 100kg		
	Ply board (3/4)		
	PVC clamp Expansion seal with log screw		
	Quantity is based on actual installation conditions		
	NOTE:		
	1. Refer to the attached camera assignment layout for the installation of camera.		
	2. Installation shall include the setup, cabling, configuration and/or programming of the complete system.		
	3. Schematic Diagram, Configurations, Full admin user account shall be turned over to the direct end user and all other accessories that come with the equipment.		
	4. Installation and equipment shall come with one (1) year warranty.		
	Testing Period: 7 days		
	No training however an orientation will be required to be shouldered by the winning bidder		
	Delivery including Installation Period: 60 Calendar Days from receipt of P.O.		
	Point of Delivery: ZCWD Property Section, Motorpool, Pasonanca, Z.C.		

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