

DESCRIPTION	PROJECT	LOT	QUANTITY	TOTAL COST	Remarks
CCTV CCTV & Security Equipment		CCTV System	1		* Require site inspection with certification from the Office * Require presentation during Post Qualification
A. Passive and Active components	CCTV & Security	CCTV System			
Server - To be configured as NAS server or VMS Server - minimum Intel Xeon Quad Core Processor (the higher the better) - minimum 4x GB FC4 1866 (DDR4-2133P) - Registered DIMMs (RDIMMs) - minimum of 2 Gigabit LAN ports - rack mountable chassis - minimum 32 TB SAS, 10K rpm SAS drive, 4x 5.25"	CCTV & Security Equipment	CCTV System	1		
Workstation for the Control Room - Should be installed with free VMS for monitoring - Small form factor - Intel Core i5-4590 or better, 3.3 GHz, 64 bit Quad Core Processor, 8 MB L3 Cache - Memory - minimum of 8 GB DDR3 1600 (the higher the better) - Storage - 1 TB 7200RPM SATA - Gigabit LAN port - Windows 7 Professional - Graphics card 16 GB - Car support monitors at least 3 monitors Daisy Chain - Mini display port, HDMI, DVI, VGA, S-Video inputs	CCTV & Security Equipment	CCTV System	3		
Wall Monitors for VMS Operator Client - 32 inch LED Monitor - Full HD 1920 x 1080 resolution - Precise color reproduction - Mini display port, HDMI, DVI, VGA, S-Video inputs - Fast response time - Support the video card of the workstations - High contrast ratio of 3,000:1 - Color enhancement engine and built-in speaker - Includes the necessary mounting for wall	CCTV & Security Equipment	CCTV System	6		
POE+ 24 ports, layer 2, 10/100 mbps, 2 SF module ports - Layer 2 Manageable type switch - 24 Ports (10/100Mbps) - Auto-sensing Ports - Power over Ethernet (PoE+) - 1 RJ-45 Serial Console Port - 2 Mini-GBIC SFP Ports	CCTV & Security Equipment	CCTV System	4		
POE+ 8 ports, layer 2, 10/100 mbps, 2 SF module ports - Layer 2 Manageable type switch - 8 Ports (10/100Mbps) - Auto-sensing Ports - Power over Ethernet (PoE+) - 1 RJ-45 Serial Console Port - 2 Mini-GBIC SFP Ports	CCTV & Security Equipment	CCTV System	2		
Patch Panel, Cat6, 1U, 24 ports	CCTV & Security Equipment	CCTV System	6		
SFP - Small form-factor pluggable (SFP) Gigabit LH transceiver that provides a full-duplex straight solution up to 70 km on single-mode	CCTV & Security Equipment	CCTV System	10		
Single mode Fiber Optic Patch Cords (3 meters) SC-LC Length: 3 meters Fiber Compatibility: 9/125µm Fiber Type: Singlemode Fiber Cable Type: Jacketed Fiber Cable Size: 3 millimeters diameter Cable Color: Yellow Cable Type: Duplex End Configuration: UPC-SC to LC Fiber Count: 2 Flammability Rating: Riser (OFNR) Insertion Loss Test: 0.15dB typical Test	CCTV & Security Equipment	CCTV System	6		
Single mode Fiber Optic Patch Cords (6 meters) SC-LC Length: 6 meters Fiber Compatibility: 9/125µm Fiber Type: Singlemode Fiber Cable Type: Jacketed Fiber Cable Size: 3 millimeters diameter Cable Color: Yellow Cable Type: Duplex End Configuration: UPC-SC to LC Fiber Count: 2 Flammability Rating: Riser (OFNR) Insertion Loss Test: 0.15dB typical Test	CCTV & Security Equipment	CCTV System	6		
B. IP Cameras - bundled with Video Management Software - should support Network Attached Storage (NAS) - motion detect recording - all cameras should be POE+ except for the	CCTV & Security Equipment	CCTV System			
Video Management Software (VMS) - Support Video Recording - Supports PTZ camera - Support Video Compression to save storage (Compression: H.264, MJPEG) - VMS Operator Client must be included - Support of 3rd party cameras via RTMP/RTSP, HTTP, JPEG, ONVIF Profile S - Supports MPEG-4 & H.264 encoders, MPEG-4 & H.264 IP cameras and IP AutoDome cameras in SD & HD format, decoders, DVRs, Recording Station. - Supports HD resolutions, at least 720p					
PTZ Dome Camera - Resolution: HD 1080p or Better - Compression: H.264, MJPEG - Max. frames per second (fps) 30 @ 1080p Varifocal - Indoor Camera that support a wide dynamic range, dynamic noise reduction and Day/Night, Infra Red at least 100 m - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS) - Support RTMP/RTSP streaming protocol Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4) Support Preset Positions Audio In/Out Support Built-in microphone Integrated optical zoom, at least 36x Automatic Back Focus Can be live stream on streaming channel like YouTube, Livestream, uStream and etc.	CCTV & Security Equipment	CCTV System	5		
Bullet Type, Outdoor - Resolution: HD 1080p or Better - Compression: H.264, MJPEG - Max. frames per second (fps) 30 @ 1080p Varifocal - Outdoor Camera that support a wide dynamic range, dynamic noise reduction and Day/Night, Infra Red at least 100 m - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS) - Support RTMP/RTSP streaming protocol - Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4) - Flexible mounting options - Include the needed mounting accessory - Four units will be installed via wireless. Video feeds from these camera should have	CCTV & Security Equipment	CCTV System	40-51		
Dome (half spherical), Indoor - Resolution: HD 1080p or Better - Compression: H.264, MJPEG - Max. frames per second (fps) 30 @ 1080p Varifocal - Indoor Camera that support a wide dynamic range, dynamic noise reduction and Day/Night, Infra Red at least 100 m - Full ONVIF Profile S and third party software support for easy integration with Video Management Systems (VMS) - Support RTMP/RTSP streaming protocol - Support for H.264 multi stream (minimum of 4) and JPEG multi stream (minimum of 4) - Audio In/Out Support - Integrated optical zoom - Automatic Back Focus - Built-in storage - Flexible mounting options	CCTV & Security Equipment	CCTV System	5		
Camera Metal Post - Supply, delivery and installation of camera posts (Min height = 5 meters) - Camera should be extended horizontally by at least 1 m from the pole - Metal should be GI pipe 3 inches diameter, rust proofing painted, gauge 40 - Electrical power should be tapped from University allowed outlets - Supplied with 500 VA UPS - Supplied with utility box for UPS and other active components - Pole should be installed on top of a concrete	CCTV & Security Equipment	CCTV System	5		
LOT 1	CCTV & Security Equipment	CCTV System		3,330,000.00	
Security Electronic Gadgets Import voltage: AC 220V +/-20% 50Hz Protection Distance: 75-150cm Dimension: 1450*400*32mm Work environment: 10C-40C Detection Magnetic Stripe 6cm (including 6cm) Protection distance: 75-150cm Detection Height: 170cm	CCTV & Security Equipment	Security Equipment	1	150,000.00	
Fire Alarm Control Panel Main supply - 240V AC 50-60Hz Battery Voltage - 24V DC Sounder Output - 24V nominal EDL 10R AUX Contacts - 30V DC 1A Max NC/NC Zone EOL - 5.6R Resistor 12=Zone Compatible for smoke detector	CCTV & Security Equipment	Security Equipment	1	40,000.00	
LOT 2	CCTV & Security Equipment	Security Equipment		190,000.00	
				3,520,000.00	