KERALA CRICKET ASSOCIATION

Supply and Installation of IP based CCTV camera and allied works at KCA stadium Mangalapuram Thriuvananthapuram

TENDER SCHEDULE

Ite m No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
1	9	**each**	Supply and Installation of 4MP Fixed Starlight IR Bullet Camera ,Focus : 4mm , Smart IR Range: Up to 50M , Built-in Mic,SD Card Slot,Reset Button , 120dB WDR , H.265+/H.265/H.264 , Up to 2592x1520@25fps , Image Sensor 1/2.8" CMOS , Signal System PAL/NTSC , Min. Illumination Color: 0.002Lux@ (F1.6, ACG ON), B/W: 0Lux with IR , Shutter Time : 1s to 1/100,000s , Day & Night: Dual IR Cut Filter with Auto Switch , Aperture F1.6, Fixed , Wavelength 850nm , Video Bit Rate : 32Kbps~6Mbps , Audio Compression G.711/G.711U/ADPCM , Audio Bit Rate 8K~48Kbps , Main Stream PAL: 25fps (2592x1520, 2560x1440, 2304x1296, 1920x1080, 1280x720) NTSC: 25fps (2592x1520, 2560x1440), 30fps (2304x1296, 1920x1080, 1280x720) , Sub Stream PAL: 25fps (704x576, 704x288, 640x360, 352x288) NTSC: 30fps (704x480, 704x240, 640x360, 352x240) , Image Enhancement: BLC/3D DNR/HLC , OSD : 16x16, 32x32, 48x48, 64x64, adaptable size, Letters Such as Week, Date, Time, Total 3 Regions , Privacy Mask 4 regions , Smart Defog , Alarm Trigger : Motion Detection, Mask Alarm, IP Address Conflict , Video Analytics : Tripwire, Perimeter , ANR : Auto store video in SD card when NVR disconnected, and upload video to NVR when resumed connection , Protocols : TCP/IP, HTTP, FTP, DHCP, DNS, DDNS, MULTICAST, IPV4, NTP, UDP, Telnet , ONVIF (PROFILE S/T/G) , Communication Interface : 1 RJ45 10M/ 100M self adaptive Ethernet port , Audio I/O : Mic in , Reset Button , Built-in MicroSD card slot, up to 512 GB , Protection : IP67, Lightning protection, surge protection and voltage transient protection , Power Consumption MAX: 6W (12V) MAX: 7W (PoE) , Power Supply DC 12V±25%, PoE (802.3af) ; Preferred Make : Honeywell / Pelco / Axis / Bosch		/each		

Item No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
2	2	**each**	Supply and Installation of 5MP IP BULLET Camera for support edge Licence Plate Detection: Image Sensor: 1/2.7" 5MP Progressive scan Motorized Lens: 5~50mm, Resolution: 2880（H）x1620（V）or Higher IR Distance: 80 Mtr. Angle of View: Horizontal: 51-7°, Vertical: 27-4°, Diagonal: 60-8°, Min illumination 0.004lux,Video Compression: H.265+; H.265; H.264+; H.264; H.264B; MJPEG ,Video Streaming: Mainstream @30fps,5MP(2880x1620),4MP(2592x1520) 3MP(2304x1296),1080P(1920x1080) 720P(1280x720), Substeam @30fps 720P(1280x720),VGA(640x480),QVGA(320x240), Third stream @30fps VGA(640x480), QVGA（320x240); Motion Detection: 4 zone, Rectangle ; Major Protocols should include most of the following TCP/IP,HTTP,DHCP,DNS,DDNS,RTP/RTSP, SMTP,NTP,UPnP,SNMP,HTTPS,FTP, ONVIF (Profile S/Profile G/Profile T); CGI; Event Trigger: Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal access, Smart Detection: Licence plate detection,Face Recognition,Human&Vehicle Detection,Perimeter Intrusion Detection,Line Crossing Detection, Cross Counting,Stationary Object Detection,Heat Map,Crowd Density Detection,Queue Length Detection, Rare Sound Detection,Advance features: Starlight, WDR(120dB),Micro SD Card Slot up to 256GB, Alarm I/O-1/1, Audio I/O 1/1,Privacy Mask up to 8 level, ICR auto switch Power Source: 12V DC/PoE Casing: Metal ,Weatherproof Standard: IP67 ; product must comply with NDAA complaince,Non Black Listed Declaration , Own Mac Address Declaration , Onvif Membership Declaration, Certification: BIS,CE,FCC,ROHS ,ISO:9001;Replacement/Repair warranty for 24 months or morePreferred make: Honeywell/ Bosch/ Axis/Pelco..		/each		

Item No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
3	2	**each**	Supply installation and commissioning of 4MP IP 23X Starlight IR POE PTZ Camera; Pan range 360° resolution Up to 2880×1620@30fps; IH+265/ H.265/H.264 ;Lens 5mm-115 mm; Image Sensor1/2.8" CMOS ; Audo I/O: 1/1; Alarm I/O: 1/1; Min. illumination Color: 0.001lux@ (F1.5, AGC ON), BW: 0lux with IR; Smart IR,Optical Zoom : 23X; digital Zoom 16X; IR Range: up to 150M; Support Human/Vehicle Classification;Cruise 16, up to 32 presets per cruise ;Pattern 8, each with 600s memory or 1000 orders;Scheduled Task - Preset, Cruise, Scan, Pattern, Alarm output ;Park Action; Support tripwire Double Tripwire, Perimeter, Object Abandon, Object Lost,Heatmap,Video Abnormal, Audio Abnormal , Object Lost, Loitering, Running, Parking , Crowd, People Counting, On Duty Detection, Safety Helmet Detection ; SD card support upto 512 GB ; Reset Button; Digital WDR ; ROI - 7 Dynamic Areas for Both Main and Sub Stream ; Picture Overlay ; Privacy Mask ; Smart Defog ; Alarm Trigger - Event Input, Event Output, Mask Alarm, Disk Full, Disk R/W Error, IP Address ConMict, MAC Address ConMict, FTP Server Exception ; Preset 500; ; Pan Manual Speed: 0.1°~80°/s, Pan Preset Speed: 80°/s; Tilt Manual Speed: 0.1°~80°/s, Tilt Preset Speed: 80°/s; Operating Conditions-30°C~65°C (IR OFF), -30°C~40°C (IR ON), 0-95%RH, IP66 ; Preferred Make : Honeywell / Pelco / Axis / Bosch .		/each		
4	1	**each**	Supply and Installation of 2MP 5-inch IR Outdoor PTZ Camera-1/2.7" Progressive Scan CMOS,Main Stream:30 fps (1920 × 1080, 1280 × 960, 1280 × 720), Sub stream: 30 fps (640 × 480, 352 × 240) ,Third stream: 30 fps (320x240),Focal Length: 5mm to 90mm, 18× Optical, 16x digital zoom, Color: 0.003 Lux @ (F1.6, AGC ON), ICR, Onvif (Profile S, Profile G, Profile T) must available on onvif portal, support H.265+,MJPEG, 120 dB WDR, 3D Digital Noise Reduction, HLC, BLC, EIS, DC 12V/POE+, IR range: 100m, Pan speed: configurable from 0.6° to 200°/s; preset speed: 200°/s,Tilt speed: configurable from 0.6° to 90°/s, preset speed 100°/s, Alarm Input-1-ch alarm input, Alarm Output-1-ch alarm output, Audio-1 channel input & output, Support on-board storage up to 256 GB (SD card not included), Supports intelligent analySupports intelligent analytics such as Auto Tracking,Face Recognition,Human&Vehicle Detection,Perimeter Intrusion Detection,Line Crossing Detection, Cross Counting,Stationary Object Detection,Heat Map,Crowd Density Detection,Queue Length Detection, Rare Sound Detection, Metal Housing, IP66,product must comply with NDAA complaince,Non Black Listed Declaration , Own Mac Address Declaration , Onvif Membership Declaration, Certification: BIS,CE,FCC,ROHS ,ISO:9001; Replacement/Repair warranty for 24 months or morePreferred make: Honeywell/ Bosch/ Axis/Pelco		/each		

Item No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
5	1	each	Supply and installation of project series Network Video Recorder, support 64 Channel, Should support Resolution:- greater than equal to 12 MP IP Camera, Network Bandwidth incoming 640 Mbps and outgoing 640 Mbps for access, support for H.265+/H.265/H.264 encoding format streaming access and decoding output, Recording play back quality: 16 ch play back simultaneously, Recording resolution up to 12MP, Recording mode: support manual, Auto, Motion detection, Alarm, trigger record mode, Operation way: Mouse, local Login: Username and password, Recording storage: Local HDD, network, Video output: HDMI/VGA/TV, Support min. 8 SATA HDDs , Each port supports min. 18TB HDD(Enterprise class),support-RAID0, RAID1, RAID5, RAID6, RAID10,Support dual Gigabit Ethernet ports,Supports 4 HDMI outputs with a maximum of 4K HD output,Alarm Input/out:16 in /4 out ,Audio:1 in / 1 out ,Supports intelligent analySupports intelligent analytics such as facial detection, Pedestrian Detection,human detection, vehicle detection,Licence plate recognition,perimeter intrusion, and line crossing statistics ,product must comply with NDAA complaince,Non Black Listed Declaration ,ISO 900:2015 , Onvif Membership Declaration , Own Mac Address Declaration, Certification: BIS,CE,FCC,ROHS , Replacement/Repair warranty for 24 months or morePreferred make: Honeywell/ Bosch/ Axis/Pelco.		/each		
6	2.00	each	Supply and installation of 8 TB surveillance HDD -
Capacity up to 8TB , Support for up to 32 cameras per drive , AllFrame TM technology ,Up to 16 AI channels for Deep Learning analytics on AI-enabled NVRs • MTBF of up to 1.5 million hours • 3-year limited warranty , INTERFACE SATA 6 Gb/s FORM FACTOR 3.5-inch , PERFORMANCE CLASS 7200 RPM Class , Advanced format (AF) , RoHS compliant⁶ , Cameras supported Up to 64 , Drive bays supported 16+ , AI streams 32, Tarnish, resistant components , Interface transfer rate (max)⁵
Approved Makes- Seagate/WD/SkyHawk		/each		
7	2	each	Supply installation testing and commissioning of Octogaonal Pole made of hot dip galvanised GI sheet 70 mm top diameter, 130 mm bottom diameter thickness 3mm base plate dimensions of 200x200x12 mm suitable for wind speed as per IS 875 Part III double arm bracket 0.5mt including connector foundation bolt 4 nos fixed in including RCC foundation and junction box etc. complete 7 Meters with all accessories including connectors as required		/each		

Ite m No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
8	3	each	Supply and fixing of 6U Wall Mount Rack with all accessorise.
Racks should be manufactured out of steel sheet punched, formed, welded and powder coated. Rack should have 100% assured compatibility with all equipment’s conforming to DIN 41494 (General Industrial Standard for equipment’s) or Equivalent EIA /ISO / EN Standard. Rack should have 2 No Adjustable, 19” verticals with Punched alternating hole pattern offering greater mounting flexibility and maximizes usable mounting space having power plug of 3 nos 16A socket Approved Makes- NETRACK or Equivalent		/each		
9	1	each	Supply and fixing of 9U Wall Mount Rack with all accessorise.
Racks should be manufactured out of steel sheet punched, formed, welded and powder coated. Rack should have 100% assured compatibility with all equipment’s conforming to DIN 41494 (General Industrial Standard for equipment’s) or Equivalent EIA /ISO / EN Standard. Rack should have 2 No Adjustable, 19” verticals with Punched alternating hole pattern offering greater mounting flexibility and maximizes usable mounting space having power plug of 5 nos 16A socket ;Approved Makes- NETRACK or Equivalent		/each		
10	2	each	Supply installation and commissioning of 6U Outdoor Pole Rack with Conforms to DIN 41494 or Equivalent EIA /ISO/ EN/ CEA Standard, Adjustable mounting depth, 2 No Adjustable, 19" verticals with Punched 10 mm Square Hole and Universal 12.7 mm -15.875mm- 15.875 mm alternating hole pattern offers greater mounting flexibility, maximizes usable mounting space having power plug of 5 nos 16A socket , Approved Makes- Netrack/Rittal (MAF Required)		/each		
11	4.00	each	Supply and installation of 24 Port POE switch
24-Port 10/100/1000 Base-T auto-sensing PoE+ ports, 4 dedicated 100/1000 380W Base-X Fiber SFP ports,Bandwidth: 56 Gbps non-blocking, Acoustic noise (ANSI-S10.12): 33.42 dBA, Mean Time Between Failures (MTBF): 1,071,896 hours, Heat Dissipation (at AC 97VAC/47Hz and full PoE load): 1501.3 Btu/H (internal PS), Forwarding modes: Store-and-forward, 4 Priority queues, Priority queuing: Weighted Round Robin (WRR), MAC Address database size: 16,000 media access control (MAC) addresses, VLAN: 256, (MAF Requared)
Approved Makes- NETGEAR/Juniper/ Allied Telesis (MAF Required)
		/each		

Item No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
12	5.00	each	Supply and installation of 24Port Fully Loaded Patch panel
Standards: ETL Verified and CAT 6 Component Compliance. , Rear Cable Manager: Metal Rear Cable Manager with Perforations should be supplied along with the panel, Material: Cold rolled steel, Coating: Powder Coating, Dust Cover on the I.O: To avoid dust contaminants. Spring Loaded Shutter, IDC V shaped, Wire Accommodation: 22-24 AWG, Plastic Housing: Polycarbonate, UL 94V-0 rated, Compatibility: Individually removable RJ 45 Port and compatible with STP, Fibre & Coax. Jack Contact Plating : 50 Micron Gold/100 Micron Gold , RJ 11 & RJ 12 Compatible , UL Listed , ROHS Compliant , 25 Years Warranty (MAF Requared)
Approved Makes-Molex,Panduit and Belden (MAF Required)
		/each		
13	5.00	each	Supply and installation of 12Port LIU with all accessorise(Splice holder , SC duplex adapter , SC pigtail) Metal Box , 19” Rack Mountable Cabinet, Cold Rolled Steel Construction , Material: Powder Coated Steel Body, Accommodation : 12 port for SC and 24 Port for LC Interface , Fusion Splice/Mechanical Splice , 6 Rubber Grommets are provided at cable entry points for tight sealing, Dimensions : 45mm H x 485mm W x 255mm D , LIU Should be provided with Lock & Key , ROHS Compliant (MAF Requared)
Approved Makes: Molex,Panduit and Belden (MAF Required)
		/each		
14	6.00	each	Supply and installation of OFC Module/Media convertor
Features Dual data-rate of 1.25Gbps/1.063Gbps operation 1550nm DFB laser and PIN photo detector for 40km transmission Compliant with SFP MSA and SFF-8472 with single LC receptacle Digital Diagnostic Monitoring: Internal Calibration or External Calibration Compatible with SONET OC-24-LR-1 Compatible with RoHS Refer Annexure 1 for detailed specification.
Approved Makes- NETGEAR/Juniper/ Allied Telesis (MAF Required)
		/each		
15	6.00	each	Supply and installation of SFP pluggable optical transceiver module which is widely used for both telecommunication and data communications applications with 5 year warranty. Its SFP port accepts both optical modules and copper cables with all accessories.		/each		

Item No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
16	5	each	Supply and installation of CAT6 UTP 3meter Patch chord
4 pair 24 AWG stranded copper wire , Pre-terminated with WE8W plugs , Slim clear anti-snag slip on boots , Suitable for EIA 568A or 568B wiring , LS0H sheath , RoHS Compliant , Conductor size: 24 AWG stranded copper wire Nom. O.D.: 5.9mm Sheath: LS0H Bend radius: 4X O.D. Operating temperature range: -20°C to 60°C. Plug MIN operating life: 750 insertion cycles RJ45 plug and boot material: Clear polycarbonate, Contact material: 0.35mm thick copper alloy Contact plating: Selective gold RJ45 plug dimensions compliant with: ISO/IEC 60603-7-4 and FCC 47 Part 68, Max voltage: 150 VAC (max) Max current: 1.5A @ 25°C, ISO/IEC 11801:2002/Amd 2:2010 Cat 6-, TIA-568-C.2 Cat 6 , ETL Verified , LS0H Sheath: CSA FT1, IEC 60332-1, IEC 61034, support data networks for 10/100BASE-T and 1000BASE-T applications.
Approved Makes-Commscope or Equivalent		/each		
17	10.00	each	Supply and installation of CAT6 UTP 1meter Patch chord
4 pair 24 AWG stranded copper wire , Pre-terminated with WE8W plugs , Slim clear anti-snag slip on boots , Suitable for EIA 568A or 568B wiring , LS0H sheath , RoHS Compliant , Conductor size: 24 AWG stranded copper wire Nom. O.D.: 5.9mm Sheath: LS0H Bend radius: 4X O.D. Operating temperature range: -20°C to 60°C. Plug MIN operating life: 750 insertion cycles RJ45 plug and boot material: Clear polycarbonate, Contact material: 0.35mm thick copper alloy Contact plating: Selective gold RJ45 plug dimensions compliant with: ISO/IEC 60603-7-4 and FCC 47 Part 68, Max voltage: 150 VAC (max) Max current: 1.5A @ 25°C, ISO/IEC 11801:2002/Amd 2:2010 Cat 6-, TIA-568-C.2 Cat 6 , ETL Verified , LS0H Sheath: CSA FT1, IEC 60332-1, IEC 61034, support data networks for 10/100BASE-T and 1000BASE-T applications.
Approved Makes-Commscope or Equivalent		/each		
18	35.00	each	Supply and installation of OFC single mode 1 to 3 meter SC – SC duplex Patch chord
100% Factory Tested – Guaranteed performance, LSOH Jacket Standard – Reduces toxic/corrosive, Sheath : LSZH, ROHS Compliant , ISO/IEC 11801, ANSI/TIA/EIA 568.C.3-2000, ANSI/TIA/EIA-492, TELECORDIA GR-409, ICEA-596 , Cordage O.D.: 2.0mm +/- 0.1mm x 4.1 +/- 0.2mm , Buffer Diameter: 900Um , Primary Coating : 245um , Suitable for use inside with Sliding and fixed patch panels , Support 24 Fusion splice protectors in 45mm or 61mm lengths , Base and Self-adhesive pads for securing on a flat surface and a lid, Material – ABS (Halogen Free) , Support Multimode and Single mode, Dimensions: 47mm x 99mm x 12mm (WxLxH) , Max. Attenuation @ 850nm: 3.5 dB/Km, Max. Attenuation @ 1300nm : 1.5 dB/Km
 Approved Makes-Commscope or Equivalent		/each		

Ite m No	Quantity	Unit	Details of work	Rate in figures	Unit	Rate in words	Amount
19	**12.00**	**each**	Supply and installation of Single shutter faceplate
Single shutter faceplate with SMB Box in recess/on surface and making good the damages, colour washing etc as requiredType : British Style Standard Face Plate , Dimensions : 86 mm X 86 mm , Material : VE10ABS , Compatible For UTP & STP , Labelling Facility(Data voice, Fax, Video) , ROHS Complaint
Approved Makes- Commscope or Equivalent		/each		
			TOTAL		Rs.		
			Add GST @ 18 %		Rs.		
			Grand Total		Rs.		
			Rounded to		**Rs.**		

Rupees in words :

Signature of Contractor:

Name and adress

Place :

Date :