

INDIAN INSTITUTE OF TECHNOLOGY BOMBAY
P.O. IIT POWAI, MUMBAI - 400 076.
OFFICE OF THE EXECUTIVE ENGINEER (ELECTRICAL)
TEL NO: 2576 7970 / 2576 7971 :: FAX NO : 2576 7972 / 2572 3480.

(PART – 2)

PRICE BID
(NOTE: SUBMISSION ONLINE ONLY)

E-TENDER
FOR

Name of work: Supplying, installing, testing, and commissioning of server-based centralized CCTV System- PH-II at IIT Bombay.

E-TENDER NO. PR. 1000036861, RFX No. 6100001699 dated. 03.04.2024

SUBMISSION OF TENDER

PART-1 Pre-qualification Bid Date & Time : 02.05.2024 : 15.00HRS
PART-2 Price Bid Date & Time : 08.05.2024 : 15.00HRS(ONLINE Only)

TENDER OPENING

PART- 1 Pre-qualification Bid Date & Time :02.05.2024:15.05HRS
PART- 2 Price Bid Date & Time :08.05.2024 : 15.05HRS



Indian Institute of Technology Bombay

Purchase Requisition

Department/Section: EMD WORKS

Indent #: 1000036861

Indenter Name: EMD INSTRUMENT, (656)

Local/International: Local

Amount: 178365078.00(Seventeen Crore Eighty Three Lakh Sixty Five Thousand Seventy Eight Rupees)

Short Description: Name of work: SITC of server based Centralized CCTV System-PH-II IITB

Location : Various locations Of IITB

Cost center: 1111017

Created By: Prashant Sarafdar

Created on: 15.12.2023

Purchase Type: PR: Adverts. Tender

Currency: INR

Item Details:

Item No	Item Code	Item Description	Quantity	Unit	Rate	Amount
10		4MP Outdoor Bullet camera Supply of 4MP Outdoor Bullet camera with 1/2.7-inch CMOS, Effective pixels 2688(H) x 1944(V), 30fps, Sensitivity, Color 0.1 lx Mono 0.04 lx With IR 0.0 lx or better, 120 dB Dynamic range, Electronic Day/ Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask, Edge based/ server based analytics such as Line crossing, Enter/ leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Minimum 6 analytics should run simultaneously, Object classes (Upright persons, Vehicles) detect up to 50 objects simultaneously, Audio detection (if microphone used), 4.9mm- 8mm Automatic Varifocal (AVF) lens, MicroSD card slot for edge recording, Motion, tamper and audio detection, FTP, IR range upto 60mtrs, ON VIF Profile S, G, T and M, PoE, IP66 and NEMA 4X, IK10, CE, FCC, UL certified: dual power supply, SD card support upto 2TB. Approved Makes: Bosch / Axis/ Mobotix / Avigilon	250.000	each	Unit rate to be in condition tab	filled online
20		4MP Outdoor Bullet camera Supply of 4MP Outdoor Bullet camera with 1/1.8 inch CMOS, Effective pixels 2688(H) x 1520(V), 60fps, Sensitivity – (Measured according to IEC 62676 Part 5 Color 0.078 lx Mono 0.008 lx With IR 0.002 lx or better, 141 dB Dynamic range, Electronic Day/ Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask, Edge based/ server based analytics such as Line crossing, Enter/ leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Minimum 6 analytics should run simultaneously, Object classes (Upright persons, Vehicles) detect up to 50 objects simultaneously, Audio detection (if microphone used), 4.70mm–10mm Automatic Varifocal (AVF) lens, Micro SD card slot for edge recording, Motion, tamper and audio detection, FTP, IR range upto 80mtrs, ON VIF Profile S, G, T and M, PoE, IP66, IP67, IP6 K9K and NEMA 4X, IK10, CE, FCC, UL certified. SD card support up to 2TB. Dual power supply. Approved Makes: Bosch/ Axis / Mobotix / Avigilon	4.000	each	Unit rate to be in condition tab	filled online

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30	<p>4MPIR Bullet camera</p> <p>Supply of 4MP IR Bullet camera with 1/1.8-inch CMOS, Total sensor pixels 2688 x 1520, 4MP; 60fps, H.265; H.264; M- JPEG, Automatic Electronic Shutter(AES); Intelligent Dynamic Noise Reduction, Intelligent Defog, Edge based/ server based analytics such as Line crossing, Enter / leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Minimum 6 analytics should run simultaneously, Object classes (Upright persons, Bikes, Cars, Trucks), Training camera for specific object, Accurate classification of person, bike, car, truck, Audio detection (if microphone used), Privacy Masking, Pixel counter, Memory card slot, IR Rang 140mtr, Automatic Vari focal 12 - 47 mm lens, Alarm Input 1/1, Audio Input/output, RJ45, Trusted platform module and PKI, G.711, Signal-to-Noise Ratio > 55 dB, Audio Streaming Full-duplex / half duplex, ONVIF Profile S and G and T, IP66, IK10. Dual micro sd card for mirror, failover, extended service, Dual power supply, UL certified, FTP, Drop box and e-mail applications. Approved Makes: Bosch/Axis/ Mobotix / Avigilon</p>	5.000	each	Unit rate to be in condition tab	filled online
40	<p>4MP Indoor Dome camera</p> <p>Supply of 4MP Indoor Dome camera with 1/2.7-inch CMOS, Effective pixels 2592(H) x 1944(V), 30fps, Sensitivity – (Measured according to IEC 62676 Part 5 Color 0.060 lx Mono 0.0120 lx With IR 0.0 lx or better, 120 dB Dynamic range, Electronic Day/ Night, Automatic Electronic Shutter (AES), H.265, H.264 MP (Main Profile); M-JPEG Video compression, White balance, Backlight Compensation, Privacy Mask, Edge based/ server based analytics such as Line crossing, Enter /leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Minimum 6 analytics should run simultaneously, Object classes (Upright persons, Vehicles) defect up to 64 objects simultaneously, Audio detection(if microphone used), 4.5mm to 8.4 mm Automatic Varifocal (AVF) lens, MicroSD card slot for edge recording, Motion, tamper and audio detection, FTP, IR range upto 40mtrs, 3 axis adjustment, ONVIF Profile S,G,T and M,PoE,IP54 and NEMA 4X, IK10, CE, FCC , UL certified. SD card support up to 2TB, Dual power supply. Approved Makes: Bosch/ Axis/ Mobotix / Avigilon</p>	14.000	each	Unit rate to be in condition tab	filled online
50	<p>1080p HD PTZ Camera</p> <p>Supply of 1080p HD PTZ Camera with 1/2" progressive scan CMOS, Effective pixels 1937 x 1097 (2.12 MP), 30x Optical Zoom, 12X Digital Zoom, Minimum Illumination - Color:0.0047 Lux, B/ W: 0.0013 lux or better, 120dB WDR, H.265, H.264, MJPEG streams, Intelligent Dynamic Noise Reduction, BLC, White Balance, Pan Range 360° continuous, Tilt Range Upright: -65° to +90°, Pan: 120°/s, Presets 250, Tours, Audio- 1/1 Channel In/ Out, Micro SD card support up to 1TB, Edge based/server based analytics such as Line crossing, Enter / leave field, Follow route, Loitering, Idle / removed object, People counting, Crowd density estimation, Minimum 6 analytics should run simultaneously, 32 individually configurable privacy masks, Dual Power options, , IP66/67/68 and NEMA NEMA TS-2, IK10, ONVIF Profiles S, G, T, M, FCC, CE, UL Certified, AES/ FIPS encryption, signed firm ware, up to 500ml Rinetnal / external, Wiper in built/external, electronic image stabilization, salt test report, wind load minimum 100mph, MTBF > 80000 hours, SDcard support up to 2TB, Dual power supply. Approved Makes: Bosch/ Axis/ Mobotix / Avigilon</p>	3.000	each	Unit rate to be in condition tab	filled online

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60		SIP-based IP horn loudspeaker	1.000	Activ. unit		
60.1		SIP-based IP horn loudspeaker Supply of 15W long throw SIP-based IP horn loudspeaker designed for Excellent speech reproduction suitable for indoor and outdoor applications(IP66).The speaker shall support PoE IEEE 802.3af Class3 and PoE+IEEE802.3 at Class4.The speaker shall have a built-in class Damplifier and Digital Signal Processing (DSP) to optimize the speech intelligibility in the environment. The speaker shall have an integrated Electret Condenser microphone for two-way SIP communication (talk back function), ambient noise level trigger, and automatic volume control. Shall be remotely configurable via WEB-GUI. Approved makes should be the same as the camera OEM. Approved Makes: Bosch/ Axis/ Mobotix /Avigilon	26.000	each	Unit rate to be in condition tab	filled online
70		Glass-reinforced plastic (GRP)	1.000	Activ.unit		
70.1		Glass-reinforced plastic (GRP) Supply and installation of a Glass-reinforced plastic (GRP) pole Complete with mounting accessories, as required for the pole and The cameras, suitable to mount the Outdoor cameras. The GRP poles shall be ultraviolet-resistant, corrosion-proof,	55.000	each	Unit rate to be in condition tab	filled online

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		<p>electrically insulated, and shall have no reaction to direct contact with water. GRP Poles shall be manufactured by Automatic CNC 4 Axis Filament Winding Process and should be designed to withstand wind speed of 50 M/sec. Depending up on the classification of the wind zone. The glass Content in the GRP material shall be $\geq 70\%$. GRP Poles shall be fire Retardant with low flammability when tested in accordance with IS6746 & ASTM D635. The Arms should be such that they are Easily fixable and interchangeable and should be able to rotate On its axis for a minimum of 90° one it her side so that it is Easier to make adjustments if required at site. The Pole shall be tested for deflection as per ASTM D 4923: the deflection under load should not be more than 15% of the length of the pole. Permanent Deflection should not be more than 1% of the length of the pole after performing the deflection test. The manufacturer should possess a valid certificate of EN-40-7 for deflection at the time of submission of the offer. The manufacturer Should possess an EN12767 certificate for passive safety for Any conical pole at the time of submission of the offer. The Pole shall be with a Box to house the power supply / Converter, etc., with the Following Specification: (The shade of the pole Is metallic silver, hardware MS zinc passivated wherever required, the bar will be painted with U.V. Stabilized, specially developed poly urethane paint for external application, tolerance in length $\pm 50\text{mm}$ & thickness $\pm 0.5\text{mm}$, average thickness of pole will be 6mm, tolerance in diameter $\pm 5\text{mm}$, the bottom surface (below ground line) of light pole is rough), 7000 MM Height, 89MM Top Diameter 162MM Bottom diameter, with anti-rotating Fins) With external junction box of size 165X165X105 mm(IP65) with 4 terminals of 6sq.mm & 10AMP SP MCB with JB Clamp. Approved Makes: SUMIP/ WIMCO/ PROFAB</p>				
80		Hard Soil Digging	1.000	Activ. unit	-----	-----
80.1		<p>Hard Soil Digging</p> <p>SITC of Hard Soil Digging a 1m deep and 0.45m wide trench, Then covered with a layer of sand. The cables are laid In the trench and covered with a 10cm thick layer of sand. To protect against mechanical injury, it is recommended That the trench be covered with bricks and other materials. It has to be restored to its original position by the bidder</p>	7500.000	m3	Unit rate to be in condition tab	filled online

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		(Eg, digging on cement/asphalt road; it has to be again made in the same conditions as before after completion of work with prior permissions from authorities.)				
90		Soft Soil Digging	1.000	Activ.unit	-----	-----
90.1		Soft Soil Digging Soft Soil Digging a 1m deep and 0.45m wide trench, then covered With a layer of sand. The cables are laid in the trench and Covered with a 10cm thick layer of sand. To protect against Mechanical injury, it is recommended that the trench be Covered with bricks and other materials. It has to be restored to its original position by the bidder (Eg, digging on cement/asphalt road; it has to be again made in the same conditions as before after completion of work with prior permissions from authorities.)	12500.000	m3	Unit rate to be in condition tab	filled online
100		Outdoor Access Switch: SITC of Outdoor Access Switch: Supply, Installation, and Testing Commissioning of Industrial Grade Fully Managed Layer 2 switch, 8x 10/100/1000 Mbps POE+ ports with 4 SFP slots. The switch should be loaded with a minimum of 2x 1Gbps single-mode SFP modules. The switch should have a minimum of one AC DC adapter. Detailed specs are given in the Technical Specification. Approved Makes: Allied Telesis/CISCO/ ARUBA	75.000	each	Unit rate to be in condition tab	filled online
110		Core Switch SITC of Core Switch: Supply, Installation, Testing Commissioning of Enterprise Grade Layer 3 stackable switch, 24 x SFP slots, 2 x 10G SFP+ slots, and 2 x 10 G stacking ports with required stacking cables. The switch should be loaded with a minimum of 12 x 1Gbps SFP copper modules and 12 x 1Gbps single-mode SFP modules. The switch should have two AC power supplies. Detailed specs are given in the Technical Specification. Approved Makes: Allied Telesis/CISCO/ ARUBA	5.000	each	Unit rate to be in condition tab	filled online
120		Indoor Access Switch SITC of Indoor Access Switch: Supply, Installation, Testing Commissioning of Enterprise Grade Fully Managed Layer 2 switch, 24 x 10/ 100/1000 Mbps Non-Po E ports with 4 SFP slots. The switch should be loaded with a minimum of 2x 1Gbps single-mode SFP modules. The switch should have a minimum of one AC power supply. Detailed specs are given in the Technical Specification. Approved Makes: Allied Telesis/CISCO/ ARUBA	1.000	each	Unit rate to be in condition tab	filled online
130		Indoor Access Switch SITC of Indoor Access Switch: Supply, Installation, Testing Commissioning of Enterprise Grade Fully Managed Layer 2 switch, 24 x 10/ 100/1000Mbps POE + ports with 4SFP slots. The switch should be loaded with a minimum of 2 x 1Gbps single-mode SFP modules. The switch should have a minimum of one AC power supply. Detailed specs are given in the Technical Specification. Approved Makes: Allied Telesis/CISCO/ ARUBA	1.000	each	Unit rate to be in condition tab	filled online

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140		Indoor Access Switch SITC of Indoor Access Switch: Supply, Installation, Testing Commissioning of Enterprise Grade Fully Managed Layer 2 switch, 16 x 10/ 100/1000Mbps POE + ports with 2SFP slots. The switch should be loaded with a minimum of 2 x 1Gbps single-mode SFP modules. The switch should have a minimum of one AC power supply. Detailed specs given in Technical Specification. Approved Makes: Allied Telesis/CISCO/ ARUBA	1.000	each	Unit rate to be in condition tab	filled online
150		2Mtr patch cord (Cat6)	1.000	Activ. unit		
150.1		2Mtr patch cord (Cat6) SITC of 2Mtr Factory moulded patch cord(Cat6) Approved Makes: DLINK/AFL/ COMMScope	450.000	each	Unit rate to be in condition tab	filled online
160		10 Mtr patch cord (Cat6)	1.000	Activ. unit		
160.1		10 Mtr patch cord (Cat6) "SITC of 10Mtr Factory moulded patch cord (Cat6) Approved Makes: DLINK/AFL/ COMMScope"	200.000	each	Unit rate to be in condition tab	filled online
170		24 Port patch panel	1.000	Activ. unit		
170.1		24 Port patch panel "SITC of 24 Port Fully Loaded patch Panel Approved Makes: DLINK/AFL/COMMScope"	3.000	each	Unit rate to be in condition tab	filled online
180		I/O Face plate	1.000	Activ. unit		
180.1		I/O Face plate "SITC of I/O Face plate with box Approved Makes: DLINK/AFL/ COMMScope"	400.000	each	Unit rate to be in condition tab	filled online
190		LIU 24 Ports LC with Pigtails	1.000	Activ. unit		
190.1		LIU 24 Ports LC with Pigtails "SITC of Fully loaded LIU24 Ports LC with Pigtails Approved Makes: DLINK/AFL/ COMMScope"	3.000	each	Unit rate to be in condition tab	filled online
200		LIU 6 Ports LC with Pigtails	1.000	Activ. unit		
200.1		LIU 6 Ports LC with Pigtails "SITC of Fully loaded LIU 6 Ports LC with Pigtails Approved Makes: DLINK/AFL/ COMMScope"	77.000	each	Unit rate to be in condition tab	filled online
210		1mtr LC to LC Single Mode Patch Cords	1.000	Activ. unit		
210.1		1mtr LC to LC Single Mode Patch Cords "SITC of 1mtr LC to LC Single Mode Patch Cords Approved Makes: DLINK/AFL/ COMMScope"	202.000	each	Unit rate to be in condition tab	filled online
220		Self Adhesive Labels	1.000	Activ. unit		
220.1		Self Adhesive Labels SITC of Self Adhesive Labels (Length 5cmX Height 1 CM); For naming and Identification of the cables and devices	1.000	Lot	Unit rate to be in condition tab	filled online
230		CAT-6 / 6A Armoured Cables	1.000	Activ. unit		
230.1		CAT-6 / 6A Armoured Cables SITC of CAT-6/6AArmoured Cables: Supply, Installation, Testing, And Commissioning of Flexible LSZH Cat-6/6A to be laid, cable Laid in Conduits/ cable Trays shall include IO Box with	15000.000	M	Unit rate to be in condition tab	filled online

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		Face plate along with the junction box at field end Approved Makes: Polycab/DLINK/AFL/ Comm Scope				
240		single mode outdoor 6 core fiber optic	1.000	Activ. unit		
240.1		Single mode out door 6 core fiber optic armored cable Supply, installation, testing, and commissioning of single mode outdoor 6 core fiber optic armored cable, zero halogen low smoke Outers heath, and laid in underground trenches and shafts, Complete with all terminations as required. The fiber optic cable shall Be used for connecting all the above-mentioned Edge Switches (located in DC, DG, Admin & Substation building) to the Core Switches located in the main DC Building. Approved Makes: Polycab/DLINK/AFL/ COMMScope	15000.000	m	Unit rate to be in condition tab	filled online
250		42U Rack	1.000	Activ.unit		
250.1		42U Rack SITC of 42U Rack with Cable Management & Rack Mounted Power Strips Full-size Monitor tray x 2no, Vertical PDU25 Socket PDU With 4Sq Cabe 32Amp Topx2, Cable manager-Metalcable manager - 01 U - Plastic Cable loop x6, Four fans for M cab/ProTekFS, Mounting hardware Pkt 20set of 20 (For Servers and Network Switches), Approved Makes: APC/ Valrack/ Rittal / Legrand	3.000	each	Unit rate to be in condition tab	filled online
260		6U Junction Box/Rack	1.000	Activ.unit		
260.1		6U Junction Box/Rack SITC of IP66 rated 6U Junction Box/Rack with wall/ Pole mounting Arrangements with support brackets, front door with compression lock, removable high-quality EPDM or PU gaskets for IP, complete welded structure with fixed rates and sides, rain canopy. Cable Manager horizontal, earthing kit with earth studs, provision for cable entry, earthing wire on front door, MCB double pole, din rail full width assemble din mounting plate top & bottom plate, Tamper switch, Din rail mounted 6Port Patch vertical Panel & other required accessorie Need to be considered (For Industrial Switches). Approved Makes: Rittal /Sumip/ Valrack	75.000	each	Unit rate to be in condition tab	filled online
270		Industrial POE Media Converter	1.000	Activ.unit		
270.1		Industrial POE Media Converter SITC of Single Mode Industrial POE Media Converter Approved Makes: Allied Telesis/ Syrotech / Cisco	80.000	each	Unit rate to be in condition tab	filled online
280		4U Junction Box/Rack	1.000	Activ.unit		
280.1		4U Junction Box/Rack SITC of IP66 rated 4U Junction Box/Rack with wall/ Pole mounting Arrangements with support brackets, front door with compression lock,	80.000	each	Unit rate to be in condition tab	filled online

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		removable high-quality EPDM or PU gaskets for IP, complete welded structure with fixed rates and sides, rain canopy. The cable Manager horizontal, earthing kit with earth studs, provision for cable entry, earthing wire on the front door, MCB double pole, din rail full width assembled in mounting plate top & bottom plate, Tamper switch Din rail mounted 6Port Patch verticle Panel other required Accessories need to be considered (For Industrial Switches). Approved Makes: Rittal /Sumip/ Valrack				
290		3 Core Electrical Armoured Cable	1.000	Activ.unit		
290.1		3 Core Electrical Armoured Cable "SITC of 3Core Electrical Armoured Cable 1.5Sqmm Approved Makes: Polycab/Finolex"	18000.000	m	Unit rate to be in condition tab	filled online
300		Electrical Universal Power Point	1.000	Activ.unit		
300.1		Electrical Universal Power Point SITC of Electrical Universal Power Point 5/15Amp, 6 Modules (2Socket&1switch,1Blankwithbox) Approved Makes: ROMA/ANCHOR	310.000	each	Unit rate to be in condition tab	filled online
310		MAIN RECORDING SERVER SITC of MAIN RECORDING SERVER Rack Type: 900Mbpsor 138 Cameras recording with 288TB Usable Storage after RAID 5/6, 1 x Intel Xeon E-2226 G Processor with 16 bays(16x18TB7200 RPM Disk) for Storage, minimum 32GB RAM, as per detailed specs given in Technical Specification. Recording at 25 FPS @1080P @1800Kbps bit rate for 90 days. Minimum quantity mentioned, Number of servers to be vetted by respective VMS and Camera OEM on letter head Approved Makes: DELL/ HP/ Camera OEM	6.000	each	Unit rate to be in condition tab	filled online
320		FAILOVER RECORDING SERVER SITC of FAILOVER RECORDING SERVER Rack Type: 900 Mbps or 138 Cameras recording with 288 TB Usable Storage after RAID 5/6, 1 x Intel XeonE-2226 G Processor, with 16 bays (16x18TB 7200RPMDisk) for Storage, minimum 32GB RAM, as per detailed specs given in Technical Specification. Recording at 25 FPS @1080P @1800 Kbps bit rate for 90 days. Minimum quantity mentioned, Number of servers to be vetted by respective VMS and Camera OEM on letter head Approved Makes: DELL/ HP/ Camera OEM	1.000	each	Unit rate to be in condition tab	filled online
330		Main MANAGEMENT SERVER SITC of Main MANAGEMENT SERVER Rack Type Trusted Platform Module 2.0 V3, 2.5" Chassis with up to 8 Hard Drives (SAS/SATA),2CPU,PERC11 Intel@Xeon@Silver4410T2.7G,10C/20T,16GT/s, 27M Cache, Turbo, HT (150W) DDR5-4000 Intel@Xeon@Silver4410T2.7G,10C/20T,16GT/s, 27M Cache, Turbo, HT (150W) DDR5-4000 Heats ink for 2 CPU configurations (CPU less than or equal to 150W). Performance Optimized 4800MT/s RDIMMs 16GB X2 RDIMM, 4800MT/s Single Rank C7, Un configured RAID for HDDs or SSDs (Mixed Drive Types Allowed) Front PERC H755 Front Load 960GB X4 SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD 480GB X2 SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD. Power Saving Active Power Controller, UEFI BIOS	1.000	each	Unit rate to be in condition tab	filled online

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		<p>Boot Mode with GPT Partition. No Energy Star Standard Fan X7. Dual, Hot-plug, Power Supply Fault Tolerant Redundant (1+1), 1400W, Mixed Mode, NAF. Jumper Cord - C13/C14, 4M, 250V, 10A (India BIS). Riser Config 3, Low Profile, 1x16 LP Slots (Gen4), Mother board with Broad com 5720 Dual Port 1Gb On-Board LOM. Broadcom 57416 Dual Port 10GbE BASE-T Adapter, OCP NIC 3.0. Standard Bezel for x 8 and x10 chassis. No Media Required. iDRAC9 Datacenter 16G with Open Manage Enterprise Advanced Plus. No Quick Sync. iDRAC, Factory Generated Password, iDRAC Service Module (ISM), NOT Installed Ready Rails A11 drop-in/stab-in Combo Rails With Cable Management Arm. Short Drive Shipping Material. BIS Marking, No CE and No CCC Marking for 2.5" Chassis, APCC- For India Basic Next Business Day 36 Months, 36 Month(s). Pro Support and Next Business Day Onsite Service, 36Month(s) according to the detailed specifications given in Technical Specification. Include MS SQL Server 2019 or above Database or better—number of servers to be vetted by respective VMS and Camera OEM on letterhead.</p> <p>Approved Makes: DELL/ HP/ Camera OEM</p>				
340		<p>FAILOVER MANAGEMENT SERVER</p> <p>SITC of FAILOVER MANAGEMENT SERVER Rack Type</p> <p>Trusted Platform Module 2.0 V3, 2.5" Chassis with up to 8 Hard Drives (SAS/SATA), 2CPU, PERC11 Intel®Xeon®Silver4410T2.7G, 10C/20T, 16GT/s, 27M Cache, Turbo, HT (150W) DDR5-4000 Intel®Xeon®Silver4410T2.7G, 10C/20T, 16GT/s, 27M Cache, Turbo, HT (150W) DDR5-4000 Heats ink for 2CPU configurations (CPU less than or equal to 150W). Performance Optimized 4800MT/s RDIMMs 16GB X2 RDIMM, 4800MT/s Single Rank C7, Un configured RAID for HDDs or SSDs (Mixed Drive Types Allowed) Front PERC H755 Front Load 960GB X4 SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD 480GB X2 SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD. Power Saving Active Power Controller, UEFI BIOS Boot Mode with GPT Partition. No Energy Star Standard Fan X7. Dual, Hot-plug, Power Supply Fault Tolerant Redundant (1+1), 1400W, Mixed Mode, NAF. Jumper Cord - C13/C14, 4M, 250V, 10A (India BIS). Riser Config 3, Low Profile, 1x16 LP Slots (Gen4), Motherboard with Broad com 5720 Dual Port 1Gb On-Board LOM. Broadcom 57416 Dual Port 10GbE BASE-T Adapter, OCP NIC 3.0. Standard Bezel for x8 and x10 chassis. No Media Required. iDRAC9 Datacenter 16G with Open Manage Enterprise Advanced Plus. No Quick Sync. iDRAC, Factory Generated Password, iDRAC Service Module (ISM), NOT Installed Ready Rails A11 drop-in/stab-in Combo Rails With Cable Management Arm. Short Drive Shipping Material. BIS Marking, No CE and No CCC Marking for 2.5" Chassis, APCC- For India Basic Next Business Day 36 Months, 36 Month(s). Pro Support and Next Business Day Onsite Service, 36Month(s) according to the detailed specifications given in Technical Specification. Include MS SQL Server 2019 or above Database or better—number of servers to be vetted by respective VMS and Camera OEM on letterhead.</p> <p>Approved Makes: DELL/ HP/ Camera OEM</p>	1.000	each	Unit rate to be in condition tab	filled online
350		<p>ANPR Workstation</p> <p>SITC of ANPR Work station : Rack/Tower Mount, Intel Core i7-11700 or better, minimum 32 GB RAM</p>	1.000	each	Unit rate to be in condition tab	filled online

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		or better, minimum 240 GB SSD for OS & VMS Application, 1TB SATA HDD, 1 GbE (RJ45), Windows 11 Pro 64 bit or above, DVD RW, Standard and Keyboard & Mouse; Number of servers to be vetted by by respective VMS and Camera OEM on letter head. Approved Makes: DELL/ HP/ Camera OEM				
360		Client Workstation SITC of Client Workstation :Workstation capable to display maximum 36 cameras@H.264@1080P @25FPS Processor – Intel Core i7-10700K or latest CPU (Intel Quick Sync Supported),Memory– Minimum 32 GB, Hard disks – 500GB SSD Disk, OS- Windows 10 Pro, 64bit,Network Card – 1Gbit/s network card, GPU - NVIDIA GTX 1080p Series or Quadro P4000 Graphic card WHQL Certified or better; Number of workstation to be vetted by respective VMS and Camera OEM on letter head. Approved Makes: DELL/ HP/ Camera OEM	25.000	each	Unit rate to be in condition tab	filled online
370		Client PC "Client PC :SITC of Workstation capable to display maximum 36 cameras @H.264 @ 1080P @25FPS Processor – Intel Core i7-10700K or latest CPU (Intel Quick Sync Supported),Memory– Minimum 32 GB, Hard disks – 500GB SSD Disk, OS-Windows10Pro,64bit,NetworkCard– 1Gbit/s network card ,GPU NVIDIA X 4000 or better Series WHQL Certified or better. Number of workstation to be vetted by by respective VMS and Camera OEM on letter head. Approved Makes: DELL/ HP/ Camera OEM"	9.000	each	Unit rate to be in condition tab	filled online
380		Tripple arm table top brackets	1.000	Activ.unit	-----	-----
380.1		Tripple arm table top brackets " SITC of Tripple Arm table Top Brackets Approved Makes: DELL/HP / Lumi / Inofit Or Custom"	9.000	each	Unit rate to be in condition tab	filled online
390		Server Rack Type Intel Video analytics SITC of Server Rack Type Intel Xeon 2.2Ghz with Base Frequency (32Cores) or Higher, 64GBRAM, 3 TB HDD. Including NVIDIA RTX A2000 (12GB) or Higher (Graphics Card 2 Nos) Number of Server to be vetted by by respective VMS and Camera OEM on letter head. Approved Makes: DELL/ HP/ Camera OEM	2.000	Lot	Unit rate to be in condition tab	filled online
400		Video wall SITC of Video wall display 55"24x7 Operational, 500 Nits , 0.8-0.9 mm bezel width Professional FHD monitor. Approved Makes: Samsung/ LG/ Barco	10.000	each	Unit rate to be in condition tab	filled online
410		Video Analytics Processing Software	1.000	Activ.unit	-----	-----
410.1		Video Analytics Processing Software SITC of Video Analytics Processing Software TO Support a Minimum of one camera programmed with any one or all Of the following Video Analytics features: Fire & Smoke Detection- for 10 camera Face Recognition system - for 8 Camera ANPR - for 10 Camera Slip & fall Detection - for 10 Camera Multi Camera Tracking - for 50 Camera Alarm Centre Application license -1 Nos One time Online Installation and Training Charges(The System shall allow implementation of Video Analytics on any	1.000	each	Unit rate to be in condition tab	filled online

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		user-defined cameras during commissioning).-The Software should be able to inter face with the Video Management System either by an interface or shall be offered as a Unified Solution consisting of Access Control and Video management systems in a single software. Independent servers, if required, for video analytics shall be included in this item as needed. The Cost shall be considered for 50 cameras in the beginning and shall have expand ability for up to 1000 cameras if required. Approved Makes: Milestone/Algovision/IRIS(Agent V)/OOSTO				
420		ANPR License	1.000	Activ.unit		
420.1		ANPR License ANPR License with all required support package and 5 years License Support Approved Makes: Milestone/ Genetec/ Axis	4.000	each	Unit rate to be in condition tab	filled online
430		FHD monitor SITC of 21"colour,Flat Screen type Professional FHD monitor with HDMI Interface and Tabletop Stand Approved Makes: DELL/HP/Lenovo/LG/ Samsung	52.000	each	Unit rate to be in condition tab	filled online
440		Network Video Management Base Software	1.000	Activ.unit		
440.1		Network Video Management Base Software SITC of Network Video Management Base Software expandable up to 2000 camera sin Single Data base server,Multi-server, multi-site solution Virtual Matrix capability & unlimited user clients. The VMS should Support ON VIF Profile S, G, T & Q, network joystick controller, GPU Rendering support for H.264 and H.265 decoding, video on demand, Adaptive video throttling, rule engine, operator role management, server-based Video Motion Detection(VMD),edge storage backfill support, a bookmark with a manual comment, bookmark based search, time line search, Pre view search, dual recording server instances with out virtualization, synchronous play back from all recording servers monitor wall support, Cyber secured with features such as Digital Signing, HTTPS & SSL base, smart web client, camera firmware & password management, support ANDROID& iOS phones. • Camera Device License (600Nos) (Including Old and New Cameras) • Camera License with 5Years Support (600 Nos) • Failover License for Management & Recording Server (2 Nos) • Operator Client Licences (100 Nos) • Mobile and web client licenses (100 Nos) • Dashboard & Reporting Tool Plugin (1 Nos) • SDK/APK Cost for Integration with Access Control, BMS (1 Nos) Approved Makes: Milestone/ Genetec/ Axis	1.000	each	Unit rate to be in condition tab	filled online

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450		Multi Screen FHD Video Wall Controller	1.000	Activ.unit		
450.1		Multi Screen FHD Video Wall Controller SITC of Multi Screen FHD Video Wall Controller Pure hardware system structure, which processes images with the use of a fast internal bus and FPGA. It is integrated with the functions of distributed and centralized controllers, leading to a quick start, stable function, mass IP stream processing, and real-time display of images. It supports signa Over lapping and roaming. Moreover, Controller can be widely applied To control centers of Traffic, Electric Power, Telecom, Data Centre, Monitoring, Conferences, Public Security, Military, etc. Including Wall Management Software feature, -Any Source on Any Display- Source Over lapping-PIP and POP, -Auto Source Detection,-Ticker Scrolling Text-Up to 4x4 Grids Option in Each Display,- Unlimited Layouts,- Crestron/ AM X devices can control layouts,-Multi Video wall Supports- Scheduling of Layouts, - Supports Control by Web Browser- Hot Swappable Graphic Card, Fan, Power Supply,- Support 4K Resolution Background Images on the Whole Video Wall,-4 Slot Chassis with capabilities to add Input and Output using any slot. - 1 Slot having 8 HDMI Inputs or Output Cards – Include 2 HDMI Input Cards(16Nos HDMI Inputs) and 2 HDMI Output Cards (16 Nos HDMI Outputs) Approved Makes: Drita/ Jupiter/ Seada	1.000	each	Unit rate to be in condition tab	filled online
460		Professional Wall Mount	1.000	Activ.unit		
460.1		Professional Wall Mount SITC of Professional Wall Mount with Quick Lock Push System. with pop-in, pop-out hydraulic system. Multi-dimensional micro adjustment to fit the Video wall display. Approved Makes: Lumi / Btech / Chief	10.000	each	Unit rate to be in condition tab	filled online
470		HDMI Transmitter & Recevier	1.000	Activ.unit		
470.1		HDMI Transmitter & Recevier SITC of 4K604:4:4HDMI Transmitter & Recevier Extender Over Cat 6 up to 70 Meter. Compatiable for HDR10 +, and HDCP 2.3. Approved Makes: Crestron / Extron / Kramer	20.000	Pair	Unit rate to be in condition tab	filled online
480		Cat 6 Cable	1.000	Activ.unit		
480.1		Cat 6 Cable SITC of Cat6 Cable Approved Makes: DLINK/AFL/ COMMSCOPE	300.000	m	Unit rate to be in condition tab	filled online
490		AV Rack	1.000	Activ.unit		
490.1		AV Rack SITC of Custom Size AV Rack with Spike protector rack mount Approved Makes: Approved Makes: APC/Valrack/ Rittal / Legrand	1.000	each	Unit rate to be in condition tab	filled online

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500		HDMI Patch Cables	1.000	Activ . unit		
500.1		HDMI Patch Cables SITC of HDMI Patch Cables 1.8 Mtr Approved Makes: Crestron / Extron / Grandlogic	20.000	each	Unit rate to be in condition tab	filled online
510		connectors & Cables Packages	1.000	Activ.unit		
510.1		connectors & Cables Packages SITC of Various types of connectors & Cables Packages Approved Makes: Crestron / Extron / Grandlogic	1.000	Lot	Unit rate to be in condition tab	filled online
520		Installation and configuration	1.000	Activ. unit		
520.1		Installation and configuration Installation and configuration of VMS (Server)for complete monitoring & Recording system for IP Cameras and Speakers. It should include, Define and activate the camera, Setup the deployment, Camera Recording Setting, VMS /Camera Setting conflict, Camera defaults, Compression Scales, Multi-streaming Setup, Server side motion detection, camera Grouping, Camera batch configuration, time synchronization,motion boosting. Each server can communicate with up to 600 cameras /encoders. MS Server Client—graphical interface enabling remote viewing and control from anywhere on the Internet or corporate network	1.000	each	Unit rate to be in condition tab	filled online

PR has been electronically approved by;

Prashant Sarafdar



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