

Schedule - 'A1'

PRICE SCHEDULE (BILL OF QUANTITIES)

SITC of RFID Gate Access System at MPA Gate No.9, Gate No 2 and Break water Berth Gate and Biometric attendance System with two years guarantee period followed by Three years

SR. No.	SYSTEM	HARDWARE	DESCRIPTION	UNIT	QTY	Rate/ unit (Rs)	Amount (Rs)	GST%
				(A)	(B)	(C)	(D)=B x C	E
PART A (RFID Gate Access Control System)								
(I)Supply								
1	Boom Barrier System	a) Boom Barrier	Arm length 3.5 mtrs Max 6 meter,Power supply 230 AC V 50/60 Hz), Opening time at 90° (s) 3 to 6 Sec ,Built-in LED flashing light requires no maintenance and ensure total visibility Protection rating (IP) 54, Built-in safety photocells fit directly onto the barrier cabinet, Oval boom with anti-impact rubber edge. Maximum sail-effect reduction, to ensure proper operation even in areas swept by strong winds.	No.	4			
		b) Boom Barrier accessories	Magnetic loops, sensors, Remote & push button, etc.	set	4			
		c) LED Indicator (signal lights)	BI Colour LED indicator	No.	6			
2	TV	LED Display (TV DISPLAY)	Heavy duty display 42", wall mounted, with outdoor, weather proof industrial enclosure & accessories, with necessary URL launcher	No.	8			
3	Camera (for vehicles)	ANPR	Bullet 5.3MP, HDR 3.2-10mm, IP66, High Dynamic Range: 120 dB WDR, Video resolution : 3072 x 1728, Video Streaming Multiple configurable streams in H.264 or H.265 and M-JPEG, configurable frame rate and bandwidth. Regions of Interest (ROI), Video Performance: High Dynamic Range 120 dB WDR	No.	6			
4	Turnstile	Sensors and accessories	Bi-directional, electro-mechanical tripod turnstile Anti-backup device to prevent reverse rotation once the mechanism has moved 30°, 45° & 60° from home Positive action lock to prevent the two-passage at one time Voltage 180 - 270 VAC, 47 - 63Hz / 90 -130V, 47 - 63Hz Tripod length -380 mm/ 500 mm Throughput-25-30 persons per minute, IP Rating -IP54, Made of AISI304 stainless steel, and are removable for easy installation and wiring purposes.	No.	4			
5	Card Reader System	a) Card reader access controller	Intelligent access Controller; 2GB Flash memory; LCD Display; 8 Inputs & 8 Outputs; 4 Wiegand Readers	No.	6			
		b) Enclosure	FRP Enclosure with one DIN rail	No.	12			
		c) Power supply unit	Power supply unit with an integrated battery charging device	No.	12			
		d) Card reader device	Reader with Pigtail; Support Mobile Credential, Seos, Iclass, Mifare & prox Cards	No.	12			
6	Cards / Tags	a) Pre printed HF RFID Cards	NFC, iCLASS seos, 8kb memory	No.	10000			
		b) Card Holders + Lanyards	Lanyards: pre-printed with MPA Logo	No.	10000			
7	UPS	UPS with maintenace free batteries and accessories	3 KVA online	No.	3			
8	MISC	a) Reader/ Edge controller pole	SS pole 8-10 ft feet height	Set	10			
		b) Signage board	signage board with SS-316 grade, 60 cm X 45 cm	No.	4			

		c) Misc (Power cable + network cables) (Lumpsum)	LAN, Power, Control Cable as per specification of the devices	LS	1			
9	Hardware for Pass Issue System	a) Local gate server	13th gen INTEL 12 core or equivalent; 8GB RAM 1x8GB DDR4; 512GB SSD, with Windows 11 OS, Antivirus loaded	No.	3			
		b) Pass issue counters (PC) with 15.6" FHD monitors	13th gen INTEL core or equivalent; 8GB RAM 1x8GB DDR4; 512GB SSD, with Windows 11 OS, Antivirus loaded	No.	2			
		c) Network switch	L2 Managed 24-Port Network Switch - POE with SFP Ports – 24 x Ethernet 10/100/ PortsUp Link Port – 2 x 10/100/1000 uplink SFP Port.ports	No.	4			
		d) 4U rack for switches	IP Outdoor grade	No.	4			
		e) Servers (App server,Db server,mirror Server)	RACK SERVERS: Gen10 Server or higher 2.1GHz Eight Core Processor, 8C/16T, 9.6GT/s, 11M Cache, Turbo or higher DDR4 Smart Memory with optional Intel Optane Persistent Memory 128 GB (4x 32GB) RDIMM 128GB RAM 4 single-rotor, standard fans included 1x Embedded 4 x 1GbE Network Adapter Smart Array P408i-a SR Gen10 x8 Lanes 2GB Cache SAS 12G Modular Controller None ship standard, 8 SFF supported iLO Standard with Intelligent Provisioning 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit Storage 2 x 480 GB NVMe configured as RAID1 for OS 1.2TB SAS 12G Mission Critical 10K SFF X 5 USB WIRED KEYBOARD MOUSE QUODRO T400 4GB GRAPHICS 5 Windows Server Standard 2022 16core Legalization Get Genuine 5 Year OEM Support Antivirus loaded with appropriate server rack	No.	3			
		f) Power Box & Accessories	8 Module	No.	8			
		g) Web camera	1080p, Optical full HD streaming camera, auto focus, compatible with PC / laptop	No.	2			
		h) SignaturePads	Pen tablet to capture signatures & drawings to insert into document & applications, Dimensions: 305.5mm X 268.4mm X 10.5mm, USB interface, Cordless digital Stylus pen with pen-tip and two barrel buttons, work area: 8X6 Inches	No.	2			
		i) Thermal Label Printers	USB connectivity, monochrome, print speed 6 ppm, resolution: std min. 8 dots per mm (203 dpi), 400MHz processor, 16MB DRAM, 8MB flash storage memory	No.	2			
		j) LaserJet Printer	High speed USB 2.0, ISO std print 18ppm (mono)	No.	1			
		k) Scanners	USB connectivity, 600 resolution, flatbed	No.	2			
l) 1 TB HDD	External HDD	No.	2					

		m) Smart Card PrinterS	Single- or dual-sided printing. Capable on printing PVC sticky cards also. Thermal/ Dye sublimation printing, 100 card covered feeder (30 mil). • Min 30 Card capacity output hopper (30 mil) • 16-Character LCD operator control display • 300 dpi (11.8 dots/mm) print resolution Print speed: Min 180 Cards per hour, Built-in 10/100 Ethernet connectivity	No.	2			
		n) Incident Management (Laptop)	Core i5 12th Gen - 8 Gb/512 Gb Ssd/Windows 11 Pro Antivirus loaded	No.	1			
		o) Office Table and Chairs	Ergonomically designed revolving Table and chairs with castor wheels(set)	set	3			
10	Hand held Readers	Hand held Readers	6.0in. L x 3.0in.W x 0.70 in. H 155mm L x 75.5mm W x 18.6mm H.....(+/- 5%), 5.0 in. High Definition (1280 x 720);Corning Gorilla Glass, Dual mode capacitive touch with stylus or bare or gloved fingertip input (Conductive stylus solid separately), Rechargeable Li-Ion, Power precision., ≥15.48 Watt hours ≥ 4150 mAh, improved battery metrics for better battery management, fast charging (upto 2.4A), User accessible MicroSD upto 32GB SDHC and upto 128 GB SDXC, 1 Nano SIM slot, Network Connection: WWAN, WLAN, WPAN (Bluetooth), Memory : 2GB RAM/16 GB Flash or higher, OS : Android 7.0 Nougat or higher, Scanning: imager (1D and 2D) with extraordinary range Scan range – Code 39 barcode. 20Mil 2.0in to 30.0in/5.08 cm to 76.2cm 4 Mil 3.3in to 8.8 in/8.4 cm to 22.4 cm, Camera : Rear-13 MP autofocus,1/2.4 aperture rear camera flash LED generates balanced white light, supports Torch mode.	No.	2			
11	Software & License(Access Control System)	a) ANPR License charges		No.	4			
		b) Card reader access system license		No.	1			
		c) Software Application & Functionalities (PAC) This will be developed and completely Customized as per MPA Port / Standard Port Gate Management System		LS	1			
(II) Installation, Testing & Commissioning of Part A items				LS	1			
					Sub-total 'A'			
PART B (BIOMETRIC ATTENDANCE SYSTEM)								
(I)Supply								

12	Software & License(Biometric Attendance System)	Software Application & Functionalities (PAC) This will be developed and completely Customized as per MPA Port / Standard Port Attendance Management System		LS	1			
13	Biometric Reader	Facial Biometric Reader	CPU 2.2GHz GPU ARM G52 MP4 GPU, Memory (RAM + Storage) 2GB RAM + 16GB eMMC Quad-core or higher Face detection Support multiple people detection and tracking, Face Database Capacity 20000 / 50000 Camera Type Dual RGB and Near Infrared Camera Network 1x RJ45 10M/100M RS232 / RS485 Wiegand Interface Supported Proximity Sensor IR Sensor Smart Card Reader ISO14443 Type A/B Cards, Mifare Classic / Desfire, 4G Module Nano SIM Slot, 150Mbps Download/50Mbps Upload Certification CE, RoHS, BIS, IP65, IK05	No.	20			
14	Cards / Tags	Pre printed RFID Cards of Employees ID Card	Compatible with the Biometric Card Reader & RFID readers	No.	1200			
15		Card Holders + Lanyards	Lanyards as per color specified with pre-printed MPA Logo	No.	1200			
16	Hardware for Biometric Attendance system	a) Biometric Registration PC	13th gen INTEL core or equivalent; 8GB RAM 1x8GB DDR4; 512GB SSD, with Windows 11 OS, Antivirus loaded	No.	1			
		b) Servers (App server,Db Server)	Minimum 12 core or better dual socket with Processor and base frequency 2.8 GHz, or higher 32 GB UDIMM DDR4 3200 MT/s (2x 16 GB) Embedded 1Gb 2-Port Ethernet Adapter Embedded Intel VROC SATA software RAID 1TB SATA 6G Midline 7.2K LFF RW HDD 4 LFF HDD Bays (Non Hot Plug) 1 PCIe 4.0 slots, 3 PCIe 3.0 slots Windows Server 2022 Standard(*64 bit) or higher, SQL SERVER 2022 STANDARD EDITION OR HIGHER (Licensed version). , Antivirus loaded	No.	2			

17	Network Video Recorder(NVR)	<p>8 Channel NVR, Resolution-Upto 32 MP or better, Storage Upto 24TB or better.</p> <p>eSATA/ External iscsi storage support required, Onvif Supported, Live Display-VGA/ DVI/ HDMI with Dual Display Video Codec-H.264, H.265 or better, VMS PreInstalled with Cyber Security Complied and Certified from Third Party,Calendar / Event / Bookmark / Smart Search required,Bandwidth 120 Mbps or better, Operating System-Windows/ Linux, PoE Budget -200W or better (Built in or external POE Switch),Backup AVI, SEC, Manual backup, Onetime schedule backup, Audio-G.711 u-law (PCM), G723, G726 (ADPCM), AAC, Bidirectional for all channels, Camera Setup-Auto/ Manual Camera Features Automatic device IP scan, Profile edit, Resolution, Fisheye dewarping, Hallway/ Corridor view, Brightness / Contrast, Device setup page, Exporting / Importing devices settings, Device firmware update ,PTZ- Control Device Via GUI, Controller, Preset, Redundancy-NTP server, Protocol Support-CP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server,Client), PPPoE, SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP,</p> <p>ONVIF (Profile-S), API (Server, Client), DDNS IPv4, IPv6 supported, Security-IP address filtering, User access log, 802.1x authentication, Encryption, Signed Firmware,Viewer Software-Web Viewer and application software shall be provided, Network-RJ-45 (1000 Base-T) x2,Certification CE, FCC, UL, BIS</p>	No.	5			
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18	2 MP IR Bullet Camera	<p>Image Sensor-1/2.8" CMOS,Minimum Illumination-Color: 0.1Lux(F1.6),Effective Pixels -1920(H) x 1080(V),White Balance -ATW / AWC / Manual / Indoor / Outdoor, Lens-4-9(±1) mm Motorized Varifocal, IR -Min. 40mtr or better, Gain Control (AGC)-Auto/Manual,Video Compression-H.265/H.264/MJPEG, Built in lens, Resolution-1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240, Protocol-HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; IPv4/v6; QoS; UPnP; NTP; Multicast; HTTPS; FTP; ICMP; IGMP; ONVIF (Profile S, Profile G, Profile T), Smart Detection-Classification of object like Person, Vehicle Attributes of Vehicle like type of vehicle as car,bus,truck,motorcycle,bicycle) AI based analytics motion detection, object detection, virtual line, intrusion, loitering, defocus, people counting, Vehicle counting, Queue management, Heatmap, Event Trigger-Analytics, Network disconnect, Alarm input, Ethernet-1 RJ-45 (10/100Base-T), Power Source -12V DC/PoE, Weatherproof Standard-IP66 , IK10, Certifications-BIS, FCC, CE, UL & RoHs, 1. Housing of Cameras shall be from the same OEM of CCTV System. 2. All the Cameras & NVR components / parts / assembly / software used in the offered hardware and software must not be complying to GB28181, GB/T 28181-2011; GBT 28181-2011 protocols/ standards and there should be no option to activate or deactivate GB/T 28181 standards in the camera web page/Settings 3. OEM shall provide declaration on letter stating SOC/Sensor/Chipset used in the camera with Chipset make and model no. & shall fall under the guidelines of GFR</p>	No.	16			
19	UPS for Biometric reader	<p>Voltage AC 100-240V, 50-60 Hz, Output Power (max.)-21 W,USB Output Voltage-5V DC,USB Power & Current-1.8A / 9W, DC Output Voltage-9V / 12V, DC Power & Current-1) 9V / 1.9A / 17W/ 2) 12V / 1.4A / 17W, Multiple Output Modes-9V and 12V, Battery-8800mAh or higher,Backup Time-Up to 120 min or higher, Battery Level Indicator Yes, helps check charge/backup level, Backup Mode Indicator-Red LED indicator,Certifications-BIS, CE, FCC, ROHS Certified, Complete with mounting arrangement.</p>	No.	20			

20		Network Rack	6U Wallmount Rack Network Rack, Racks are fabricated out of CRCA steel CNC Programmed, punched, bent, Welded and powder coated with highest quality standards Front Glass door with lock and key provides visibility and security for your equipments	No.	13				
21		a) Network Switches	L2 -Managed Switches POE with SFP Port Compitable with MPA's existing CISCO network ,Ports – 24 x Ethernet 10/100/ PortsUp Link Port – 2 x 10/100/1000 uplink SFP Port.	No.	1				
		b) Network Switches	L2 -Managed Switches POE with SFP Port Compitable with MPA's existing CISCO network ,Ports – 8x Ethernet 10/100/ Ports Up Link Port – 2 x 10/100/1000 uplink SFP Port.	No.	15				
(II) Installation, Testing & Commissioning of Part B items				LS	1				
					Sub-total 'B'				
PART C (CMC)-36 Months									
22	CMC charges	1st year		month	12				
		2nd year		month	12				
		3rd year		month	12				
					Sub-total 'C'				
PART D (Manpower)-60 Months									
23	Manpower for Access	a) PASS Issue Counter	Data Entry Operatpor(DEO) at Gate 9 and IHEP(3 in shifts at new gate 9+ 1 reliver) + 1 DEO at IHEP	No	5				
		b) Engineer	General Shift (9:00hrs - 17:00 hrs)	No	1				
					Sub-total 'D'				
					TOTAL AMOUNT (A+B+C+D) (Exclusive of GST)				

Total (In Words)Rupees : _____

Date:

Signature:

Place:

Name:

Address:

Office Seal of firm

Note: The rates quoted shall be inclusive of transportation, lodging and boarding, out-of- pocket expenses (OPE) on conveyance, communication expenses, 3rd party expenses and subsistence expenses on site but