



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

Ref: 2582/BFF-Project/2024

Date: 06-10-2024

### Invitation to Tender for IT Equipment to develop IT Infrastructure

Bangladesh Football Federation (BFF) hereby invites financial offer from the reputed IT equipment and service suppliers a for the purchasing of IT Equipment to develop IT **Infrastructure for Bangladesh Football Federation.**

#### Eligibility Criteria

- Any person(s) or entities with an existing un resolved dispute (i.e., Financial, Disciplinary and any other) with BFF or AFC on a point of law or fact shall be ineligible to acquire the aforementioned rights or to participate in the Bidding Process.
- IT firm must have at least 5 (Five) years of experience in providing this kind of services.

#### Cost of the Bidding:

The bidder shall bear all costs associated with the preparation and submission of his or her bid, and the Bangladesh Football Federation shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

#### Specification:

MDC/SERVER RACK PART		UoM	QTY
SL No	Item Description		
1	Bidder must submit the actual BOM as per the site visit and guidance		
	<b>Micro Data Center for Data Hall/Server Room</b>	Set	1
	Brand: Rittal/Rosenberger/Internationally Reputed Brand		
	Model: To be mentioned by bidder		
	Country of Origin: USA/EU		
	Country of manufacture: Should be mentioned by the Bidder		
	User Space 42U		
	Close Cabinet 42U: Approximate 800mm x 1200mm x 2200mm (+/-)		
	IT enclosure with perforated aluminum/sheet steel front door.		
	Steel sheet rear door, multi-piece roof plate for side cable entry on both sides		
	Two (19") vertical mounting rails, front and rear, on depth stay. (19") assembly parts and complete grounding kit.		
	Accessories include tool-free "snap-in technology" options for air flow, cable management, shelves, power distribution units, etc.		
	<b>Front Doors</b>		
	Aluminum/sheet steel front door		
	<b>Rear Doors</b>		
	Aluminum/sheet steel rear door		



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	<b>Roof</b>		
	Multi-piece roof plate for side cable entry via brush strips across the entire enclosure depth. Roof plate for retrofitting, removable despite already made cable routing.		
	Base Frame		
	<b>Rack Mounted Air Conditioners</b>		
	Color: Same as Server Rack		
	Total cooling output 50/60 Hz		
	BTU (kW): 4.2 or More		
	Refrigerant g: R134a, 1750		
	IoT interface		
	Direct on-site analysis via a Near Field Communication		
	Mobile app facility		
	Weight lbs (kg): To be mentioned by the Bidder		
	<b>Integrated Fire Suppression System</b>		
2	<b>UPS with Battery Cabinet</b>	Nos	2
	<b>Two nos. of UPS. One Primary &amp; One Secondary. Each UPS with 30 mins backup</b>		
	Brand: Santak/Legrand/Internatioanlly Reputed Brand		
	Country of Origin: USA/EU		
	General Features		
	Nominal power (VA): 10000		
	Active power (W): Minimum 9000		
	Technology: On-Line Double Conversion VFI-SS-111		
	Waveform: Sinusoidal		
	UPS architecture: convertible tower and rack 19		
	Surge Rating: 1900		
	ECO Mode efficiency: %97,5		
	<b>Input</b>		
	Input Voltage: 230V		
	Input frequency: 40Hz-70Hz Input Voltage Range: 110~275VA		
	Input		
	power factor: > 0.99		
	<b>Output</b>		
	Output voltage 230V ± 1%		
	Output frequency (nominal) 50/60 Hz (can be set from the LCD panel) +/- 0.1%		
	<b>Batteries</b>		
	<b>Bidder must submit the actual BOM &amp; battery calculation</b>		
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by bidder		
	Battery Type: VRLA/Li-ion		
	Battery Qty: Minimum 16 units 12v 26Ah		
	<b>Communication and management</b>		
	Display and Signals: To monitor the status of the UPS in real time.		
	Communication Ports RS232 serial ports, USB		
	Must have SNMP communication facility		
	Operating temperature (°C) 0 ÷ 40 °C		
	Degree of protection IP20		
	Relative humidity (%) 0-95% non-condensing		
	Noise level at 1 m (dBA) < 50		





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	Standards EN 62040-1, EN 62040-2, EN 62040-3		
	<b>Battery Cabinet for UPS</b>		
	Dimensions: To be mentioned by the Bidder		
3	<b>Vertically Critical Power Distribution System</b>	Nos	2
	IP based Vertical ICT 24 Port PDU (PDU inlet level monitoring) with 3 meter power cord (Single Phase 32 A)		
	Brand: Internationally Reputed Brand		
	Model: To be mentioned by bidder		
	Country of Origin: USA/EU/UK		
	Intelligent PDU should be Single phase and shall have 32 A IEC-309 Industrial connector		
	Input		
	Nominal Input Voltage -220 to 240 VAC +6% , -10%		
	Input Frequency - 50/60 Hz		
	Input Connections-IEC 309 32A 3P+N+E		
	Input Power 7.04 to 7.68 kVA		
	Cord Length-3 meters minimum		
	Maximum Input Current per phase-32A		
	Output		
	Nominal Output Voltage- 220 to 240V		
	Maximum Total Current Draw per Phase- 32A		
	Output Connections- Ports: IEC C13 X 20 and IEC C19 X 4 Sockets		
	Overload Protection Hydraulic Magnetic flash mount Circuit Breakers		
	Mounting		
	Size- Zero U		
	Toolless Design		
	Environmental		
	Operating Temperature 0 to- 60 °C Storage -25 to 65°C		
	Operating Relative Humidity -5 - 95%		
	Conformance		
	CE, Canada ICES-003, Part 15 Class A of the FCC rules, RoHS compliant		
	Intelligent PDU should offer real-time remote power monitoring of power at the inlet, CB, RMS current, RMS voltage, Apparent and Active power (kVA, kW), Power Factor (PF) and Energy consumption (kWh) PDU should have 2 Network Ports - 10/100 mbps ports either to access from two separate Networks or in failover mode PDU should support multiple types of Sensors i.e. Temperature & Humidity.		
	PDU should support both Port-forwarding and Bridge Protocols for accessing the cascaded PDUs.		
	PDU should provide power information from Line. PDU should have LCD Display for of the power information from Line, CB.		
	PDU should have USB Ports for serial access to PDU, PDU should support configuration of user defined thresholds and alerts. PDU should have Circuit Breaker Trip Alarming feature. PDU should support sending / recording alerts to users via SNMP, SMTP, GSM SMS, Syslog, etc. PDU should support variety of access protocols including HTTP, HTTPS, NTP, SMTP, SSH, Telnet, SSL, SNMP v1, v2 and v3, SNMP INFORMS		





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	PDU should support both IPv4 and IPv6 network protocols. PDU should support integration with LDAP/LDAPs and AD for secure authentication. PDU should support setting Password Policies and Strong encryption.		
	PDU should have an audible alarm (beeper) to indicate current overload.		
	PDU should support integration with DCIM Software for providing periodical data of power consumption.		
	PDU USB Ports should support WiFi networking, PDU to PDU cascading up to 16 devices,		
	PDU should have dedicated button lock for each sockets.		
	PDU should comply with regulatory CE and UL certifications.		
	Rack PDU shall be bus bar technology, field Rewireable input cable with flush mount Hydraulic Magnetic Circuit Breaker		
	Rack power distribution offerings meet the needs to monitor the power down to the <b>PDU inlet level</b> .		
	PDU inlet level monitoring		
	Current Monitoring:		
	Alarm thresholds – User-defined thresholds provide alarms to alert users of potential problems.		
	User Interface , load indicator, provision for Temperature, humidity and dry contact and water leak sensors		
	Units have a digital display and network connections in built in PDU Color matrix LCD display		
	PDU should Indicates overload and warning conditions based on the user-defined alarm thresholds.		
	Management		
	ANALYSIS AND REPORT FEATURES - such as trending data logs . alerting capabilities HTTP, HTTPS, SSH, TELNET, SNMP, SYSLOG and Email		
	ADMINISTRATIVE FEATURES - including choosing who to email in the event of problems		
	MONITORING AND NOTIFICATION FEATURES - Such as fault notification of critical events.		
<b>3.1</b>	<b>STS for Single Power Source Equipment</b>	Nos	1
	Brand: Any international Reputed Brand		
	Model: Please mention		
	Country of Origin: USA/EU		
	Coountry of Manufacture: Please mention		
	Size/rating: 16 A		
	Voltage: 220 V +/- 10%		
	Frequency (Hz): 50		
	Number of poles switching : 2-pole switching		
	Input Connections-IEC 309 32A 3P+N+E		
	Output Outlet: 16 x C13; 4 x C19		
	The STS shall feature outlet-level metering		
	Neutral system: compatible with all earthing systems		
	billing-grade (+/-1%) power metering accuracy		
	The STS should have indicator lamps to indicate input source, outputs, power quality, etc.		
	Admissible power factor: No restrictions		
	Rack Transfer Switch should be CE and UL Certified		
	SNMP enable		





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	STS for Single Power Source Equipment		
	Accessories		
	Supply, Installation & Commissioning charge		
4	<b>Temperature &amp; Humidity Sensor 1 Pcs per Rack</b>	Nos	1
	Brand: To be mentioned by bidder		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	Two Temperature & one Humidity Sensor in each sensor for each rack. Temperature (2) & Humidity (1) Sensor with Replaceable Sensor Head. 3M Cat5 Cable with RJ45 Connector.		
5	<b>Water Leak Detector (3 Meter)</b>	Nos	1
	Brand: To be mentioned by bidder		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	The EMS water leak sensor is supplied with 3m of leak detection cable. The cable can be run under air conditioning units, in ceiling voids, under pipes, and around room perimeters to provide a comprehensive, easy-to-install, leak detection facility.		
6	<b>Smoke Detector for IT Room</b>	Nos	1
	Brand: Any Reputed Brand		
	Flashing LED option		
	Quick and Easy Action		
	Durable and Reliable		
	Compliance assurance		
	Voltage: 12 to 24VDC		
	Alarm Current: 30aA		
	Sensitivity: 50% obscuration/ft		
	Connectivity & Testing	Nos	6
7	<b>Lockable Power Cord</b>		
	Brand : To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	Compatible Locking Power Cord, Cord Locks on server Ends, IEC C14 to IEC C13		
	1 meter IEC C14 to IEC C13		
8	<b>Structured Cabling/Copper Connectivity</b>	Box	1
	Brand: R&M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
	Cat-6 U/UTP Cable 23 AWG, 250Mhz, LSZH cable 305 meter per box		
	10baseT Ethernet		
	100baseTX Fast Ethernet		
	1000baseTX Gigabit Ethernet		
	155 MBit ATM		
	622 MBit ATM		
9	<b>1 Ton Split Type Wall Mount Air Conditioner with Drainage Work</b>	Nos	1
	Brand: Gree/Equivalent		
	Country of Origin: China/Equivalent		
	Technology: Inverter		



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	Capacity: 1 Ton		
	Capacity of Cooling (BTU): 12000		
	Airflow: 680 m3/h		
	Noise Level: Indoor: 31dB Outdoor: 52dB		
	Compressor Type: Rotary		
	Condenser Type: copper tube condenser		
	Refrigerant Type: R-32A		
	Power		
	Power Voltage: 1Ph,220-230V, 50Hz		
	Power Consumption: 1162Watt		
	Physical Specification		
	Dimensions: Indoor: 825× 293 ×196mm Outdoor: 732 ×550× 330mm		
	Must have sync facility		
	Warranty: Official Standard		
10	<b>Dehumidifier for IT Room</b>	Nos	1
	Brand: Gree/Equivalent		
	Country of Origin: China/Equivalent		
	Capacity: 24 Ltr		
	Power Supply: 1Ph 220~240V, 50Hz		
	Features: Dehumidifier-Non Inverter		
	Input (Watt): 680		
	Dehumidification Capacity: 0.47		
	Air Circulation (m3/h): 220		
	Noise (dB): 42		
	Warranty: Official Standard		
11	<b>Co2 Fire Extinguisher</b>	Nos	1
	Brand: Any Reputed Brand		
	Capacity: 5 Ltr		
	Item: CARBON DIOXIDE (Co2)		
12	<b>Drainage Line Work for MDC Air Conditioners</b>	Job	1
13	<b>Accessories, Installations &amp; Commissioning</b>	Job	1
<b>MDC Electrical Works</b>			
<b>Bidder must visit the site to actual the quantity</b>			
	18 SWG Sheet steel enclosed, dust and vermin proof, free standing, floor mounting or wall mount, 415 V, 50 Hz, indoor type Low Tension distribution panel complete with hard drawn electrolytic copper busbars with proper heat shrink tube as mentioned below TPN & E and equipped.		
14	<b>MDB</b>	Set	1
	<b>Incoming :</b>		
	01. Nos. Digital Multifunction Meter with Phase indicating lamp RED/YELLOW/BLUE		
	01 nos 80A TP, 36KA, MCCB Adjustable type		
	<b>OUTGOING:</b>		
	1 Set Enclosure with 100 A TP+N+PE Copper busbar		
	Bus bar & Linkbar with insulation		



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	02 Nos 50A,DP, 10kA, MCB (C Curve) For UPS-01& 02		
	01 Nos 16A, SP, 10kA, MCB (C Curve)For MDC PAC		
	02 Nos 32A, SP, 10kA, MCB (C Curve)For Spare		
<b>15</b>	<b>UPS-01 Output DB-01 &amp; UPS-02 Output DB-02</b>	Set	2
	<b>Incoming:</b>		
	01 nos 50A,DP, 10kA, MCB (C Curve)		
	Phase indicating lamp		
	<b>OUTGOING:</b>		
	1 Set Enclosure with 100A L+N+PE Copper busbar		
	Bus bar & Linkbar with insulation		
	01 Nos 32A,SP 10kA, MCB (C Curve) For PDU		
	01 Nos 16A,SP, 10kA, MCB (C Curve)For 16A STS		
	02 Nos 16A,SP, 10kA, MCB (C Curve)For Spare		
<b>16</b>	<b>Electrical Cabling</b>		
	<b>All the electrical cable Qty will be at actual as per site condition.</b>		
16.1	Exjusting DB to MDB incoming (1C x 25rm/mm <sup>2</sup> )} 3P+N NYY	Meter	15
16.2	Exjusting DB to MDB incoming Grounding (1C x 16rm/mm <sup>2</sup> )} BYA.	Meter	15
16.3	MDB to UPS-01 & 02 Incoming to UPS O/P DB -01& 02 (3C x 10rm/mm <sup>2</sup> )} 3P+N NYY	Meter	20
16.4	MDB to MDC PAC (3C x 4rm/mm <sup>2</sup> )} 3P+N NYY	Meter	10
16.5	UPS O/P DB to PDU - 1A side and 1B side (3C x 6rm/mm <sup>2</sup> )} 3P+N NYY	Meter	15
16.6	UPS O/P DB to 16A STS - 1A side and 1B side (3C x 4rm/mm <sup>2</sup> )} 3P+N NYY	Meter	15
16.7	STS to 12U Rack-(1,2,3,4, & 5) (3C x 2.5rm/mm <sup>2</sup> )} L+N+PE, BYM	coil	1
16.8	Grounding Cable for DB to Rack Connectivity (1C x 2.5rm/mm <sup>2</sup> )} BYA Green	Meter	25
<b>17</b>	<b>Electrical Sockets</b>		
17.1	<b>Industrial Socket 32A SP</b>	Nos	2
17.2	<b>Industrial Socket 16A SP</b>	Nos	2
	<b>MK Socket</b>		
17.3	3-Pin with 2 pin socket	Nos	2
17.4	Electrical Accessories		
17.5	Flexible Pipe ( 2.5" ) inch	Coil	1
17.6	Ladder for ( Power Cable )	Rft	24
17.7	Others Accessoreis	Lot	1
17.8	Supply, Installation & Commissioning charge	Job	1
<b>SERVER PART</b>			
<b>19</b>	<b>SERVER</b>	Nos	1
	Model: PowerEdge R760XS		
	Base: PowerEdge R760xs Server	Nos	1
	Trusted Platform Module: Trusted Platform Module 2.0 V3	Nos	1
	Chassis Configuration: 2.5" Chassis with up to 8 Hard Drives (SAS/SATA), 2 CPU, PERC11	Nos	1
	Processor: Intel® Xeon® Silver 4514Y 2G, 16C/32T, 16GT/s, 30M Cache, Turbo, HT (150W) DDR5-4400	Nos	2
	Processor Thermal Configuration : Standard Heatsink for 2 CPU configuration	Nos	1
	Memory Capacity: 32GB RDIMM, 5600MT/s, Dual Rank	Nos	4



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	RAID Configuration: C7, Unconfigured RAID for HDDs or SSDs (Mixed Drive Types Allowed)	Nos	1
	RAID Controller : Front PERC H755 Rear Load	Nos	1
	Hard Drives : 2.4TB Hard Drive SAS ISE 12Gbps 10K 512e 2.5in Hot-Plug	Nos	6
	SSD : 480GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD	Nos	2
	Advanced System Configurations: UEFI BIOS Boot Mode with GPT Partition	Nos	1
	Fans: Standard Fan x5	Nos	1
	Power Supply : Dual, Hot-plug, Power Supply Fully Redundant (1+1), 800W, Mixed Mode, NAF	Nos	1
	Power Cords: Jumper Cord - C13/C14, 4M, 250V, 10A (US, EU, TW, APCC countries except ANZ)	Nos	2
	PCIe Riser: Riser Config 0, No Riser, 3x16 + 1x8 (2 CPU), with OCP	Nos	1
	Motherboard: PowerEdge R760xs Motherboard with Broadcom 5720 Dual Port 1Gb On-Board LOM, MLK	Nos	1
	OCP 3.0 Network Adapters: Broadcom 57416 Dual Port 10GbE BASE-T Adapter, OCP NIC 3.0	Nos	1
	Additional Network Cards: Broadcom 57416 Dual Port 10GbE BASE-T Adapter, PCIe Low Profile	Nos	1
	Bezel: PowerEdge 2U Standard Bezel	Nos	1
	Embedded Systems Management: iDRAC9, Enterprise 16G	Nos	1
	Rack Rails: ReadyRails Sliding Rails with Cable Management Arm	Nos	1
	Dell Services: Extended Service : ProSupport and Next Business Day Onsite Service-ACDTS, 36 Month(s)	Nos	1
20	<b>SAN Storage</b>	Nos	1
	Model : Dell ME5024 Storage Array		
	Base: Dell ME5024 Storage Array	Nos	1
	Controller Cards: 10Gb iSCSI Base-T 8 Port Dual Controller	Nos	1
	Hard Drives: 2.4TB 10K RPM SAS 12Gbps 512e 2.5in Hot-plug Hard Drive	Nos	7
	Rack Rails: Rack Rails 2U	Nos	1
	Bezel: ME Series 2U Bezel	Nos	1
	Power Supply : Power Supply, 580W, Redundant, WW	Nos	1
	Regulatory: Regulatory Label for Dell EMC ME5024/ME4024/ME424, CE Marking - APCC & TW	Nos	1
	Power Cords: Jumper Cord - C13/C14, 4M, 250V, 10A (US, EU, TW, APCC countries except ANZ)	Nos	2
	Warranty : ProSupport and Next Business Day Onsite Service-ACDTS, 36 Month(s)	Nos	1
21	<b>NAS Storage</b>	Nos	1
	<b>CPU: Intel® Xeon® E-2334 4C 8T 3.4GHz, up to 4.8GHz</b>		
	CPU Architecture: 64-bit x86		
	Graphic Processors : Optional via a PCIe adapter		
	Floating Point Unit		
	<b>Encryption Engine: Yes (AES-NI)</b>		
	System Memory : 16 GB ECC DDR4 (1 x 16 GB)		
	Maximum Memory: 128GB (4 x 32 GB)		
	<b>Memory Slot: 128GB (4 x 32 GB)</b>		
	<b>For dual-DIMM configuration: you must use a pair of identical DDR4 modules.</b>		







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	Flash Memory: 5GB (Dual boot OS protection)		
	Drive Bay: 18 (12 x 3.5-inch SATA + 6 x 2.5-inch SATA)		
	Drive Compatibility: 3.5-inch bays, 3.5-inch SATA hard disk drives, 2.5-inch SATA solid state drives, 2.5-inch bays, 2.5-inch SATA solid state drives		
	Must have Hot-swappable availability		
	M.2 Slot: Optional via a QM2 PCIe adapter		
	SSD Cache Acceleration Support		
	GPU pass-through		
	2.5 Gigabit Ethernet Port(2.5G/1G/100M): 2 (2.5G/1G/100M)		
	10 Gigabit Ethernet Port : 2 x 10GBASE-T (10G/5G/2.5G/1G/100M)		
	Wake on LAN (WOL)		
	PCIe Slot: 3 (2 x Gen4 x4 +1 x Gen 4 x8)		
	Card dimensions for PCIe slot 1 : 250 x 68.9 x 23.76 mm / 6.70 x 2.71 x 0.94 inches.		
	Card dimensions for PCIe slot 2 : 250 x 68.9 x 18.76 mm / 6.70 x 2.71 x 0.74 inches.		
	Card dimensions for PCIe slot 3 : 250 x 68.9 x 18.76 mm / 6.70 x 2.71 x 0.74 inches.		
	Wider cards can be installed if the next PCIe slot will not be used.		
	USB 3.2 Gen 2 (10Gbps)Port: 4 x Type-A USB 3.2 Gen 2 5V/1A 10Gbps		
	HDMI™ Output: Optional via a PCIe adapter		
	Form Factor: 2U Rackmount		
	OS: Linux Red hat Enterprise latest license (1 Year basic)		
	Windows Server 2022 Standard - 16 core license pack (Life time)	Nos	1
	Windows Server 2022 - 1 device CAL (Life time)	Nos	1
	SQL Server 2022 Standard Edition (Life time)	Nos	1
	SQL Server 2022 - 1 Device CAL (Life time)	Nos	1
	<b>HDD: SEAGATE EXOS 20TB 7200 RPM SATA NAS HDD, 5 YEARS</b>	Nos	6
	<b>Warranty : Standard 5 Years Warranty for NAS</b>		
<b>22</b>	<b>Attached Network Package Storage</b>		
	Storage : Seagate EXOS ST20000NM007D Enterprise HDD/20TB/7.2K/SATA 6Gb/s	Nos	6
<b>ACTIVE PART</b>			
<b>23</b>	<b>Core Router</b>	Nos	1
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU		
	Form Factor: 1U Rackmount		
	Architecture: ARM 64bit		
	CPU: AL73400		
	CPU core count: 16		
	CPU nominal frequency: 2000 MHz		
	Switch chip model: To be mentioned by the bidder		
	RouterOS license: Minimum 6		
	Operating System: RouterOS v7 or Better		
	Serial console port: RJ45		



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	RAM: 16 GB		
	Storage Size: 128MB		
	Storage Type: NAND		
	Number of AC input: 2		
	AC input range: 100-240		
	Number of PSU slots: 2		
	Frequency (Hz): 47-63		
	Max power consumption: 83 W		
	Max power consumption without attachments: 60 W		
	Cooling type: 4 fans		
	Must have CPU, PCB and Voltage Monitoring facilities		
	Warranty: 1 Year Official Standard and Replacement Facility		
24	<b>Firewall</b>	Nos	1
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Environmental</b>		
	Maintain International Quality Environmental Safety standard.		
	<b>Hardware Architecture</b>		
	The appliance should have 8 x 1 GE Copper port from day one.		
	The appliance-based security platform should be capable of providing firewall, application visibility, and IPS functionality in a single appliance. The solution should provide with next-generation firewall, Next-generation IPS & malware protection with application visibility/identification from day one.		
	The appliance hardware should be a multicore CPU architecture with a hardened 64-bit operating system to support higher memory.		
	Proposed firewall should not be proprietary ASIC based in nature & should be open architecture based on multi-core CPU's to protect & scale against dynamic latest security threats.		
	<b>NGFW features</b>		
	Solution must be capable of passively gathering information about network hosts and their activities, such as operating system, services, open ports, client applications, and vulnerabilities, to assist with multiple activities, such as intrusion event data correlation, elimination of false positives, and policy compliance.		
	Firewall should support creating access-rules with IPv4 & IPv6 objects simultaneously.		
	Firewall should support operating in routed & transparent mode.		
	Should support Reputation- and category-based URL filtering offering comprehensive alerting and control over suspect web traffic and enforces policies on more than 275 million of URLs in more than 80 categories.If required URL filtering can be enable by adding license in future.		
	Should support safe search and youtube EDU enforcement.		
	Solution must be capable of passively gathering details unique to mobile devices traffic to identify a wide variety of mobile operating systems, mobile applications and associated mobile device hardware.		
	Should support more than 3800 application and risk-based controls that can invoke tailored intrusion prevention system (IPS) threat detection policies to optimize security effectiveness.		





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	Must be capable of providing network-based detection of malware by checking the disposition of known files in the cloud using the SHA-256 file-hash as they transit the network and capability to do dynamic analysis on-premise on purpose built-appliance if required in future.		
	NGFW OEM must have its own threat intelligence analysis center and should use the global footprint of security deployments for more comprehensive network protection.		
	VPN Peers: 75 or More		
	New connections per second: 25000		
	URL filtering: number of categories: More than 80		
	Support for Fire walling, Routing & Switching: From day 1		
	Throughput: 890 Mbps		
	AC input voltage: 100 to 240V AC		
	AC maximum power draw: 115W		
	AC frequency: 50 to 60 Hz		
	Temperature: operating 0 to 40°C		
	Humidity: operating 90% noncondensing		
	USB: 1 x USB 3.0 Type-A (500mA)		
	Transport Layer Security (TLS): 195 Mbps		
	IPSec VPN throughput: 400 Mbps		
	Security Intelligence: Standard, with IP, URL, and DNS threat intelligence		
	URL filtering: number of categories: More than 80		
	Maximum VPN Peers: 75		
	Installation, Testing and Commissioning		
	Warranty: Manufacturer's warranty part number should be mentioned, minimum 5 (Five) years warranty for OEM technical solution support. Patch & New Software Upgrade, RMA replacement should be provided for this unit from the date of commissioning. Manufacturer should have local office & Local Depo in Bangladesh		
25	<b>Distribution Switch</b>	Nos	1
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Environmental</b>		
	Maintain International Quality Environmental Safety standard		
	<b>Form factor</b>		
	Rack Mountable with Rack Mounting Kit		
	<b>Architecture</b>		
	Should have minimum of 24 x 1GE ports with 4x10GE fixed Uplink Ports.		
	Switch should support stacking from day 1.		
	Must have minimum 2GB DRAM & 4GB Flash		
	The Switch Stack Architecture Plug & Play for attaching or removing any switch from the stack without any downtime.		
	Switch should support Software Defined Network (SDN) and can be integration with SDN controller if required in future.		
	Minimum Switching capacity 128 Gbps or more		
	<b>Switching Performance</b>		
	Minimum Forwarding rate 95 Mpps or more		
	Layer 2 switch ports and VLAN trunks		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	<b>Switch Layer 2 Services</b>		
	IEEE 802.1Q VLAN encapsulation		
	Support for up to 4000 VLANs ID		
	Minimum 16,000 MAC Address		
	Support minimum 9198 bytes Jumbo frame		
	Support STP, RSTP, EtherChannel/LACP, VLAN Trunking, Q-in-Q/IEEE VLAN Tunneling		
	Must have 6 MB of shared buffer for traffic/packet Queuing and processing		
	Layer 2, Routed Access (RIP, EIGRP Stub, OSPF - 1000 routes), PBR, PIM Stub Multicast (1000 routes), PVLAN, VRRP, QoS, FHS, 802.1X, MACsec-128, CoPP, SXP, IP SLA Responder from Day 1		
	<b>Switch Layer 3 Services</b>		
	Support Minimum Up to 3,000 IPv4 routing entries and 11,000 IPv4 route		
	Support minimum 16,000 flow entries for security and traffic visibility.		
	Support Dual-stack for IPv4/IPv6 for IPv4-to-IPv6 migration.		
	Support 802.1X, Router Advertisement guard, IPv6 snooping, IPv6 ND inspection, IPv6 device tracking		
	<b>Security features</b>		
	Support L2 IEEE 802.1AE -128 bit security from day 1		
	Support OS, Firmware/BIOS & patch authenticity as encrypted images to protect from unauthorized and modified/cracked images.		
	Support SNMP, syslog, NetFlow or SFlow, Data telemetry collection and correlation for performance monitoring.		
	<b>Management features</b>		
	Support sampled NetFlow/SFlow, Switched Port Analyzer, Remote SPAN, shared NetFlow/SFlow policy, RSPAN and packet capture tool like Wireshark for troubleshooting and network visibility.		
	The switch must have at least 5,00,000 hours Mean Time Between Failure (MTBF) for hardware reliability.		
	Installation, Testing and Commissioning		
	Warranty: 1 Year Official Standard and Replacement Facility		
26	<b>Access Switch Type 1</b>	Nos	4
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Environmental</b>		
	Maintain International Quality Environmental Safety standard		
	<b>Form factor</b>		
	Rack Mountable with Rack Mounting Kit		
	<b>Architecture</b>		
	Should have minimum 48x 10/100/1000 RJ45 PoE+, 4x 1G SFP uplinks with each switches from day 1. Power budget 370W. All the modules should be OEM original and same as Switch brand.		
	Must have minimum 512 MB DRAM & 256 MB Flash		
	<b>Switching Performance</b>		
	Minimum Switching bandwidth should be 104 Gbps		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Minimum Forwarding bandwidth 52 Gbps and Forwarding rate(64—byte L3 packets) should be 77.38 Mpps		
	<b>Switch Layer 2 Services</b>		
	Layer 2 switch ports and VLAN trunks		
	IEEE 802.1Q VLAN encapsulation		
	Support for up to 4094 VLANs ID		
	Minimum 16,000 MAC Address		
	Support minimum 10,240 bytes Jumbo ethernet frame		
	Support STP, RSTP, EtherChannel/LACP, VLAN Trunking, Q-in-Q/IEEE VLAN Tunneling		
	<b>Security features</b>		
	Support 802.1X, Router Advertisement guard, IPv6 snooping, IPv6 ND inspection, IPv6 device tracking		
	Support OS, Firmware/BIOS & patch authenticity as encrypted images to protect from unauthorized and modified/cracked images.		
	<b>Management features</b>		
	Support SNMP, syslog, NetFlow or SFlow, Data telemetry collection and correlation for performance monitoring.		
	Support sampled NetFlow/SFlow, Switched Port Analyzer, Remote SPAN, shared NetFlow/SFlow policy, RSPAN and packet capture tool like Wireshark for troubleshooting and network visibility.		
	The switch must have at least 1,452,667 hours Mean Time Between Failure (MTBF data) for hardware reliability.		
	Installation, Testing and Commissioning		
	Warranty: 1 Year Official Standard and Replacement Facility		
27	<b>Access Switch Type 2</b>	Nos	1
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Environmental</b>		
	Maintain International Quality Environmental Safety standard		
	<b>Form factor</b>		
	Rack Mountable with Rack Mounting Kit		
	<b>Architecture</b>		
	Should have minimum 48x 10/100/1000 Ethernet ports, 4x 1G SFP uplinks with each switches from day 1.		
	Must have minimum 512 MB DRAM & 256 MB Flash		
	<b>Switching Performance</b>		
	Minimum Switching bandwidth should be 104 Gbps		
	Minimum Forwarding bandwidth 52 Gbps and Forwarding rate(64—byte L3 packets) should be 77 Mpps		
	<b>Switch Layer 2 Services</b>		
	Layer 2 switch ports and VLAN trunks		
	IEEE 802.1Q VLAN encapsulation		
	Support for up to 4094 VLANs ID		
	Minimum 16,000 MAC Address		
	Support minimum 10,240 bytes Jumbo ethernet frame		
	Support STP, RSTP, EtherChannel/LACP, VLAN Trunking, Q-in-Q/IEEE VLAN Tunneling		
	<b>Security features</b>		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Support 802.1X, Router Advertisement guard, IPv6 snooping, IPv6 ND inspection, IPv6 device tracking		
	Support OS, Firmware/BIOS & patch authenticity as encrypted images to protect from unauthorized and modified/cracked images.		
	<b>Management features</b>		
	Support SNMP, syslog, NetFlow or SFlow, Data telemetry collection and correlation for performance monitoring.		
	Support sampled NetFlow/SFlow, Switched Port Analyzer, Remote SPAN, shared NetFlow/SFlow policy, RSPAN and packet capture tool like Wireshark for troubleshooting and network visibility.		
	The switch must have at least 1,452,667 hours Mean Time Between Failure (MTBF data) for hardware reliability.		
	Installation, Testing and Commissioning		
	Warranty: 1 Year Official Standard and Replacement Facility		
28	<b>Access Switch Type 3</b>	Nos	1
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Environmental</b>		
	<b>Form factor</b>		
	Rack Mountable with Rack Mounting Kit		
	<b>Architecture</b>		
	Should have minimum 24x 10/100/1000 Ethernet PoE+ ports and 195W PoE budget, 4x 1G SFP uplinks with each switches from day 1.		
	Must have minimum 512 MB DRAM & 256 MB Flash		
	<b>Switching Performance</b>		
	Minimum Switching bandwidth should be 56 Gbps or more		
	Minimum Forwarding bandwidth 28 Gbps or more and Forwarding rate(64—byte L3 packets) should be 41 Mpps		
	<b>Switch Layer 2 Services</b>		
	Layer 2 switch ports and VLAN trunks		
	IEEE 802.1Q VLAN encapsulation		
	Support for up to 4000 VLANs ID		
	Minimum 16,000 MAC Address		
	Support minimum 10,240 bytes Jumbo ethernet frame		
	Support STP, RSTP, EtherChannel/LACP, VLAN Trunking, Q-in-Q/IEEE VLAN Tunneling		
	<b>Security features</b>		
	Support 802.1X, Router Advertisement guard, IPv6 snooping, IPv6 ND inspection, IPv6 device tracking		
	Support OS, Firmware/BIOS & patch authenticity as encrypted images to protect from unauthorized and modified/cracked images.		
	<b>Management features</b>		
	Support SNMP, syslog, NetFlow or SFlow, Data telemetry collection and correlation for performance monitoring.		
	Support sampled NetFlow/SFlow, Switched Port Analyzer, Remote SPAN, shared NetFlow/SFlow policy, RSPAN and packet capture tool like Wireshark for troubleshooting and network visibility.		





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	The switch must have at least 698,000 hours Mean Time Between Failure (MTBF PoE) for hardware reliability.		
	Installation, Testing and Commissioning		
	Warranty: 1 Year Official Standard and Replacement Facility		
29	<b>Access Point(Indoor)</b>	Nos	25
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Radios</b>		
	5 GHz 802.11 a/n/ac Wave 2/ax, 2x2:2 2.4 GHz 802.11 b/g/n/ax, 2x2:2		
	<b>Wi-Fi</b>		
	802.11 a/b/g/n/ac Wave 2/ax		
	<b>SSID Securit</b>		
	WPA3-AES, WPA3-Enterprise, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WEP, Open		
	<b>Max PHY Rate</b>		
	5 GHz radio 2402 Mbps 2.4 GHz radio 573.5 Mbps		
	<b>Ports</b>		
	1 x IEEE 10/100/1000 Mbps		
	<b>Antenna</b>		
	5 GHz 6 dBi 2.4 GHz 5 dBi		
	<b>Power</b>		
	Typical 11W, 802.3af powered device		
	Dimensions: To be mentioned by the Bidder		
	Weight: To be mentioned by the Bidder		
	LEDs: Multi-color status LEDs, dimmable, on/off		
	Ambient Operation Temperature: 0°C to 50°C (32°F to 122°F)		
	<b>Storage Temperature</b>		
	-40°C to 70°C (-40°F to 158°F)		
	<b>Humidity</b>		
	95% RH non-condensing		
	MTBF: 831,902 hours at 50°C ambien		
	Operational Modes : Controller-less standalone Cloud-managed cnMaestro, VM		
	WLAN: 16 WLAN profiles per radio 128 clients per radio, 16 SSIDs, WPA-TKIP, WPA2 AES, 802.1x 802.11w PMF		
	Guest Access/ Captive Portal: cnMaestro, voucher-based login		
	Authentication Encryption: Hotspot 2.0, 802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS, MAC Authentication local database or RADIUS		
	Scheduled WLAN: On/off by day, week, time of day		
	Data Limit: Client bitrate/time/throughput limit per SSID		
30	<b>Access Point(Outdoor)</b>	Nos	2
	Brand: To be mentioned by the Bidder		
	Model: To be mentioned by the Bidder		
	Country of Origin: USA/EU/UK		
	<b>Radios</b>		
	5 GHz 802.11 a/n/ac Wave 2/ax, 2x2 2.4 GHz 802.11 b/g/n/ax, 2x2 BLE 4.1		
	<b>Wi-Fi</b>		
	802.11 a/b/g/n/ac Wave 2/ax		



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## BANGLADESH FOOTBALL FEDERATION

<b>SSID Security</b>	WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WPA PSK (TKIP), WEP, Open		
<b>Max PHY Rate</b>	5 GHz radio 1,201 Mbps 2.4 GHz radio 573.5Mbps		
<b>Ports</b>	1 x IEEE 100/1000/2500 Mbps 1 x IEEE 10/100/1000 Mbps Ethernet with SW configurable passive PoE output of 30V or 48V up to 30 Watts		
<b>Antenna</b>	5 GHz 9.3 dBi, Omni 2.4 GHz 5.3 dBi, Omni		
<b>Max EIRP</b>	5 GHz 36 dBm 2.4 GHz 33 dBm		
<b>LTE Filter Band</b>	38, 40		
<b>Power</b>	20W max Up to 50W when powering an auxiliary device		
<b>Dimensions</b>	To be mentioned by the Bidder		
<b>Security</b>	Kensington lock slot		
<b>LEDs</b>	Multi-color status LEDs		
<b>Ambient Operation Temperature</b>	-40°C to 65°C (-40°F to 149°F)		
<b>Storage Temperature</b>	-40°C to 70°C (-40°F to 158°F)		
<b>Humidity</b>	95% RH non-condensing		
<b>MTBF</b>	25°C = 669,174 hours 65°C = 206,739 hours		
<b>Operational Modes</b>	Standalone Cloud managed cnMaestro or VM Cloud managed XMS		
<b>WLAN</b>	1024 concurrent clients per Access Point, 16 SSIDs WPA3, WPA3 SAE, WPA3 Enterprise, WPA-TKIP, WPA2 AES, 802.1x, 802.11w PMF		
<b>Authentication Encryption</b>	802.1x EAP-SIM/AKA, EAP-PEAP, EAP-TTLS, EAP-TLS MAC authentication to local database or external RADIUS		
<b>Scheduled WLAN</b>	On/off by day, week, time of day		
<b>Guest Access</b>	See "Captive Portal" section for additional details.		
<b>Data Limit</b>	Client bitrate/time/throughput limit per SSID		
<b>Channel Selection</b>	Multimodal channel selection with AutoChannel and AutoBand. Granular control of off-channel scan and channel selection		
<b>RF Management</b>			







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## BANGLADESH FOOTBALL FEDERATION

	Multimodal RF optimization supporting AutoCell performed in the intelligent edge AP. Out-of-band RF spectrum analysis, radio self test network assurance, RF monitor with chn/noise/interference Data rate pruning and minimum data rates		
	<b>Network</b>		
	LACP (802.3ad) ,TCP connection log, NAT logging firewall, DHCP server, L2, L3 or DNS based access control, VLAN Pooling, RADIUS attribute VID, VLAN per SSID per user		
	<b>Services</b>		
	NTP, Syslog, WIDs/WIPs, SNMP traps, DNS proxy		
	Installation, Testing and Commissioning		
	Warranty: 1 Year Official Standard and Replacement Facility		
<b>CCTV &amp; SURVAILLANCE SYSTEM</b>			
<b>31</b>	<b>12U Rack</b>		
	Brand: Should be mentioned by the bidder 12U (19" Standard) Rack cabinets for Server and for communication Devices - Main Component: Size: 600 mm (w) x 12U (H) x 600 mm (D) Fan: 2 Fans (Low noise) Lock: Round, DU: 6 ports 1 power supply unit (UNIVERSAL 6PORT) +2 L-style pieces+removable side Panel assortment of (25 cages, 25 nuts, 25 screws, 25 washers) 1.2 mm thickness.	Nos	5
<b>32</b>	<b>UTP Network Cable cat6 for IP Telephone &amp; PC User</b>	Box	20
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
	Cat-6 U/UTP Cable, 250Mhz, LSZH cable 305 meter per box		
	Conductor cross-section (AWG): 23 or Better		
	10baseT Ethernet		
	100baseTX Fast Ethernet		
	1000baseTX Gigabit Ethernet		
	155 MBit ATM		
	622 MBit ATM		
<b>33</b>	<b>Cat-6A F/FTP Cable, 500Mhz 500 meter for IP Cameras &amp; AP</b>	Box	6
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
	Manufacture: To be mentioned by the Bidder		
	Part No: To be mentioned by bidder		
	Type of cable: F/FTP		
	Outer sheath: LSZH		
	Conductor cross-section (AWG): 23 or Better		
	Approximate weight: To be mention by bidder		
	Max. DC resistance of the conductor at 20°C: 80 Ohm/km		
	Characteristic impedance: 100 Ohm		
	Max. transfer impedance at 30 MHz (Ohm/km): 120 Ohm/km		
	10Base-T Ethernet		
	100Base-TX Fast Ethernet		
	1000Base-TX Gigabit Ethernet		
	10GBase-T 10 Gigabit Ethernet IEEE 802.3		

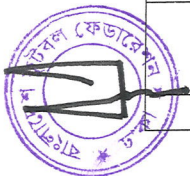




# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	155 Mbit ATM		
	future Cat 6A and Class EA applications		
	Maximum operating pulling force: 100 N		
	Flame retardant: IEC 60332-1		
	Smoke density: IEC 61034		
	Gases toxicity: IEC 60754		
	Standard: ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.		
34	<b>Patch Cord 1M Factory Made</b>	Nos	220
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
35	<b>Dual Gang Face plate:</b>	Nos	150
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
36	<b>Modular Jack For Face Plate</b>	Nos	150
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
37	<b>CAT6/6A 24 Port Universal Patch Panel</b>	Nos	15
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
	Country of Origin: To be mentioned by the Bidder		
	Height unit: 1U		
	Compatible with all Snap-In connectors		
	Sliding mechanism		
	Number of ports: 24		
	24 Snap-In ports with shutters		
	Exclusive Auto-Connect Earthing system		
	Universal design supporting Unscreened and Screened connectors		
38	<b>Cable Manager: 1U Cable Manager</b>	Nos	15
	Brand: R & M/Commscope/Rosenberger/Nexans or Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: EU/USA		
	<b>Accessories &amp; Installation</b>		
39	MK Box for faceplate:	Nos	150
	MK Box with MK screw. Brand: Any Reputed Brand		
40	Necessary Accessories	Lot	1
	Brand: Any Reputed Brand 1"/1.5" (PVC pipe, Flexible Pipe, Channel) & Labeling, MK socket, RJ 45 connector, Royal bolt, Screw, Royal plug, PVC Tape, Tie, Clamp, elbow joint and Others related accessories		
41	Installation	Job	1
	Handmade patch cord, Installation: UTP Cable laying, Modular Punching for faceplate, & Testing, Rack mounting, Dressing, AP & CCTV mounting Charge		
	<b>IP Cameras</b>		





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## BANGLADESH FOOTBALL FEDERATION

42	<b>4MP Dome Camera</b>	Nos	15
	Brand: Dahua/Lilin/Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image		
	Outputs max. 4 MP (2688 × 1520)@20 fps, and supports 2560 × 1440@25/30 fps		
	H.265 codec, high compression rate, ultra-low bit rate.		
	Built-in IR LED, and the max. illumination distance is 30 m.		
	ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.		
	Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.		
	Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)		
	Supports max. 256 G Micro SD card; built in MIC.		
	12 VDC/PoE power supply.		
	IP67 protection.		
43	<b>4MP Bullet Camera</b>	Nos	17
	Brand: Dahua/Lilin/Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	4-MP 1/2.9" CMOS image sensor, low luminance, and high definition image.		
	Outputs max. 4 MP (2688 × 1520)@20 fps and supports 2560 × 1440 (2560 × 1440)@25/30 fps		
	H.265 codec, high compression rate, ultra-low bit rate.		
	Built-in IR LED, and the max. illumination distance is 80 m.		
	ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.		
	Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.		
	Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).		
	Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.		
	Alarm: 1 in, 1 out ; audio: 1 in, 1 out ; supports max. 256 G Micro SD card; built in MIC		
	IP67 , IK10 (optional) protection.		
	12 VDC/PoE power supply, easy for installation		
44	<b>4MP PTZ Camera</b>	Nos	2
	Brand: Dahua/Lilin/Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	1/2.8" 4Megapixel Progressive CMOS.		
	Powerful 32x optical zoom		
	Max. 25/30 fps@4M.		
	IR distance up to 150 m.		
	Auto Tracking 3.0.		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Face Detection.		
	SMD 4.0.		
	PoE+.		
	IP67, IK10.		
<b>45</b>	<b>64 Channel NVR 16 Bay with 2 Years Backup Storage</b>	Nos	1
	Brand: Dahua/Lilin/Equivalent		
	Model: To be mentioned by bidder		
	Country of Origin: To be mentioned by bidder		
	64 Channel 3U 16HDDs 4K & H.265 Pro Network Video Recorder		
	16 SATA ports, up to 20 TB. The maximum HDD capacity varies with environment temperature.		
	64-channel IP video access		
	Smart H.265+/Smart H.264+/H.265/H.264/MJPEG; H.265 auto switch		
	Max 320 Mbps incoming bandwidth		
	Up to 24MP resolution for live view and playback		
	1-channel fisheye dewarping (AI by NVR)		
	AI by Camera: Perimeter protection; face detection and recognition; SMD Plus; video metadata; ANPR; people counting; stereo analysis; crowd distribution; heat map		
<b>46</b>	<b>TV 43" 4k for monitoring: Brand: Samsung/Sony/LG</b>	Nos	1
<b>47</b>	<b>HDMI cable 10 meter: Brand: Any Reputed Brand</b>	Nos	1
<b>48</b>	<b>15' Height Pole: 15' hight GI pole for Camera Mounting</b>	Nos	2
<b>IP PBAX</b>			
<b>49</b>	<b>IP PABX Server</b>	Nos	1
	Brand: Grandstream/ Mitel/ Fanvill/ Any reputed Brand		
	Model: Must be mentioned by the Bidder		
	Country of Origin: China or Equivalent		
	Analog Telephone FXS Ports: 1 RJ11 Port		
	All ports have lifeline capability in case of power outage; number of ports can be expanded by peering with an FXS gateway		
	Network Interfaces: Three self-adaptive Gigabit ports (switched, routed or dual mode) with PoE+		
	Availability of NAT Router		
	Peripheral Ports: Minimum 1*USB 3.0, 1*SD card interface		
	LCD Display: 320x240 color LCD with touch screen for Shortcut Keys and Scroll Bar or better		
	Must have Reset Switch		
	Voice-over-Packet Capabilities: LEC with NLP Packetized Voice Protocol Unit, 128ms-tail-length carrier grade Line Echo Cancellation, Dynamic Jitter Buffer, Modem detection & auto-switch to G.711, NetEQ, FEC 2.0, jitter resilience up to 50% audio packet loss		
	Voice and Fax Codecs: Opus, G.711 A-law/U-law, G.722, G722.1 G722.1C, G.723.1 5.3K/6.3K, G.726-32, G.729A/B, iLBC, GSM; T.38		
	Video Codecs: H.264, H.263, H263+, VP8		
	QoS: Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS		
	API: Full API available for third-party platform and application integration		
	Telephony Operating System: Asterisk version 16 or better		





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## BANGLADESH FOOTBALL FEDERATION

	DTMF Methods: In-band audio, RFC2833, and SIP INFO Network Protocols: SIP, TCP/UDP/IP, RTP/RTCP, IAX, ICMP, ARP, DNS, DDNS, DHCP, NTP, TFTP, SSH, HTTP/HTTPS, PPPoE, STUN, SRTP, TLS, LDAP, HDLC, HDLC-ETH, PPP, Frame Relay (pending), IPv6, OpenVPN®		
	Media Encryption: SRTP, TLS, HTTPS, SSH, 802.1X Temperature & Humidity: Operating: 32 - 113°F / 0 ~ 45°C, Humidity 10 - 90% (non-condensing) Storage: 14 - 140°F / -10 ~ 60°C, Humidity 10 - 90% (non-condensing)		
	Caller ID: Bellcore/Telcordia, ETSI-FSK, ETSI-DTMF, SIN 227 - B1, N11		
	Firmware Upgrade: Official Standard		
	Warranty: Official Standard including Replacement & Support Facilities		
50	<b>IP PABX analog VoIP gateway</b>	Nos	1
	Brand: Grandstream/ Mitel/ Fanvill/ Any reputed Brand		
	Model: Must be mentioned by the Bidder		
	Country of Origin: China or Equivalent		
	Network Interfaces: 10M/100Mbps, dual RJ45 ports		
	LED indicators: Power, Network and Line LEDs		
	Voice-over-Packet Capabilities: compliant Echo Cancellation, Dynamic Jitter Buffer, Modem detection & auto-switch		
	PTSN Fail-over Life Line: PTSN failover on power failure		
	Availability of DHCP		
	Switched Mode or PPPoE		
	T.38 compliant Group 3 Fax Relay up to 14.4kpbs & auto-switch to G.711 for Fax Pass-through		
	Diffserve, TOS, 802.1P/Q VLAN tagging		
	RTP/RTCP		
	flexible DTMF transmission method, user interface of in-audio, RFC2833, and/or SIP info		
	TFTP and HTTP		
	Syslog support, HTTPS, telnet, remote management using web browser		
	Output: 12VDC Input: 100-240VAC / 50-60Hz		
	Operational: 32-104°F or 0-40°C Storage: 14-140°F or -10-60°C Humidity: 10-90% Non-condensing		
	EN55022/EN5504 and FCC part 15 Class B		
	Safety: UL		
	Warranty: Official Standard including Replacement & Support Facilities		
51	<b>Basic IP Telephone</b>	Nos	45
	Brand: Grandstream/ Mitel/ Fanvill/ Any reputed Brand		
	Model: Must be mentioned by the Bidder		
	Country of Origin: China or Equivalent		
	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, RTCP-XR, HTTP/HTTPS, ARP, ICMP, DNS(A record, SRV, NAPTR), DHCP, PPPoE, SSH, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR069, SNMP, 802.1x, TLS, SRTP, IPv6		
	Dual switched auto-negotiation 10/100 Mbps Ethernet ports, integrated PoE		
	Single frequency, 2.4 GHz, 802.11 b/g/n/ax (2.4G only)		
	132 x 48 (2.41") LCD display or better		

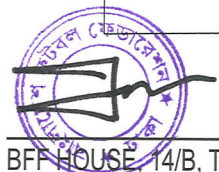




# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	4 XML programmable context sensitive soft keys, 5 (navigation, menu) keys. 8 dedicated function keys for: MESSAGE(with LED indicator), TRANSFER, HEADSET, MUTE, SEND/REDIAL, SPEAKERPHONE, VOL+, VOL		
	Support for G.729A/B, G.711 $\mu$ /a-law, G.726, G.722(wide-band), G.723, iLBC, OPUS, in-band and out-of-band DTMF(in audio, RFC2833, SIP INFO), VAD, AEC, CNG, PLC, AGC, AJB		
	Hold, transfer, forward, 5-way conference, call park, call pickup, downloadable phonebook(XML, LDAP, up to 2000 items), call waiting, call log(up to 800 records), off-hook auto dial, auto answer, click-to-dial, flexible dial plan, hot-desking, personalized music ringtones and music on hold, server redundancy and fail-over		
	RJ9 headset jack (allowing EHS with Plantronics & Jabra & Sennheiser headsets)		
	Layer 2 QoS (802.1Q, 802.1P) and Layer 3 (ToS, DiffServ, MPLS) QoS		
	User and administrator level passwords, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control, secure boot		
	Firmware upgrade via FTP/TFTP / HTTP / HTTPS, mass provisioning using GDMS/TR069 or AES encrypted XML configuration file		
	Universal Power Supply Input 100-240VAC 50-60Hz; Output +5VDC, 600mA; PoE: IEEE802.3af Class 1, 3.84W; IEEE802.3az (EEE)		
	FCC: Part 15 Class B; FCC Part 68 HAC; CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 62368-1; RCM: AS/NZS CISPR32; AS/NZS 62368.1; AS/CA S004; IC: ICES-003; CS-03		
	Warranty: Official Standard including Replacement & Support Facilities		
52	<b>IP Telephone for Authorities</b>	Nos	10
	Brand: Grandstream/ Mitel/ Fanvill/ Any reputed Brand		
	Model: Must be mentioned by the Bidder		
	Country of Origin: China or Equivalent		
	SIP RFC3261, TCP/IP/UDP, RTP/RTCP, HTTP/HTTPS, ARP, ICMP, DNS(A record, SRV, NAPTR), DHCP, PPPoE, TELNET, TFTP, NTP, STUN, SIMPLE, LLDP, LDAP, TR-069 802.1x, TLS, SRTP, IPV6		
	Dual switched auto-sensing 10/100/1000 Mbps Gigabit Ethernet ports with integrated PoE		
	2.8 inch (320x240) TFT color LCD		
	6 line keys with up to 4 SIP accounts, 4 XML programmable context sensitive softkeys, 5 navigation/menu keys, 11 dedicated function keys for: MESSAGE(with LED indicator), PHONEBOOK, TRANSFER, CONFERENCE, HOLD, HEADSET, MUTE, SEND/REDIAL, SPEAKERPHONE, VOL+, VOL		
	RJ9 headset jack (allowing EHS with Plantronics headsets)		
	Support for G7.29A/B, G.711 $\mu$ /a-law, G.726, G.722(wide-band), G723, iLBC, OPUS, in-band and out-of-band DTMF(in audio, RFC2833, SIP INFO), VAD, CNG, AEC, PLC, AJB, AGC		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Hold, transfer, forward, 5-way conference, call park, call pickup, shared-call-appearance(SCA)/bridged-line-appearance(BLA), downloadable phonebook(XML, LDAP, up to 1000 items), call waiting, call log (up to 2000 records), XML customization of screen, off-hook auto dial, auto answer, click-to-dial, flexible dial plan, hot-desking, personalized music ringtones and music on hold, server redundancy and fail-over		
	HD handset and speakerphone with support for wideband audio		
	2 angle positions available, Wall Mountable		
	Layer 2 QoS (802.1Q, 802.1P) and Layer 3 (ToS, DiffServ, MPLS) QoS		
	User and administrator level passwords, MD5 and MD5-sess based authentication, 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control, secure boot.		
	English, German, Italian, French, Spanish, Portuguese, Russian, Croatian, Chinese, Korean, Japanese, and more		
	Firmware upgrade via FTP/TFTP/TFTPS/HTTP/HTTPS, mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file.		
	Universal power adapter included: Input:100-240V ; Output: +5V, 0.6A ; Integrated Power-over-Ethernet(802.3af) IEEE 802.3az Energy-Efficient Ethernet Max power consumption 3W(power adapter) or 3.8W(PoE)		
	Operation: 0°C to 40°C Storage: -10°C to 60°C Humidity: 10% to 90% Non-condensing		
	GRP2613 phone, handset with cord, phone stand, 5V power adapter, network cable, Quick Installation Guide, GPL license		
	Dimension: To be mentioned by the bidder		
	FCC: Part 15 Class B; FCC Part 68 HAC CE: EN 55032; EN 55035; EN 61000-3-2; EN 61000-3-3; EN 62368-1 RCM: AS/NZS CISPR32;AS/NZS 61000.3.2; AS/NZS 61000.3.3;AS/NZS 62368.1; AS/CA S004 IC: ICES-003; CS-03		
	Warranty: Official Standard including Replacement & Support Facilities		
53	<b>Wall Mount IP Telephone</b>	Nos	5
	Brand: Grandstream/ Mitel/ Fanvill/ Any reputed Brand		
	Model: Must be mentioned by the Bidder		
	Country of Origin: China or Equivalent		
	SIP: SIP RFC3261, TCP/IP/UDP, RTP/RTCP, RTCP-XR, TLS, SRTP Network: IPv4, IPv6, HTTP/HTTPS, ARP, ICMP, DNS(A record, SRV, NAPTR), DHCP, SSH, TFTP, NTP, STUN, LLDP, TR-069, 802.1x		
	One auto-negotiation 10/100 Mbps ethernet port integrated PoE Class 2		
	integrated dual-band 2.4GHz & 5GHz 802.11 a/b/g/n/ac		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	23 keys, including 3 programmable keys, 12 Standard Phone Digits keys (0-9: speed dial keys configuration on web page, *, #), 5 Function keys (Flash, Redial, Hands-free, Voice Mail, Hold), 3 Volume Control keys, Up/Down/Mute(with red color LED)		
	HD handset support for wide band audio		
	Dial, Answer, Transfer, Conference, Redial, Flash ,Hands-free, Voice Mail (with the server) Hold / Unhold, Mute /Unmute, flexible dial plan, Speed dial server redundancy & fail-over Call out.		
	Support for multicast paging and E911 service Support for advanced jitter-resilience algorithm Supports GDS Door Opening		
	Wall mount base		
	Layer 2 QoS (802.1Q, 802.1p) and Layer 3 (ToS, DiffServ, MPLS) QoS		
	Secure boot, random default password, unique security certificate per device, administrator level passwords, 256-bit AES encrypted configuration file, SRTP, TLS, 802.1x media access control		
	Firmware upgrade via FTP/TFTP / HTTP / HTTPS, fast boot in 15 seconds, mass provisioning using GDMS/TR-069 or AES encrypted XML configuration file		
	FCC: Part 15 Subpart B, Class B; Part 68. 316/317. CE: EN 55032; EN 55035; EN IEC 61000-3-2; EN 61000-3-3; EN IEC 62368-1. UKCA: BS EN 55032; BS EN 55035; BS EN IEC 61000-3-2; BS EN 61000-3-3; BS EN 62368-1. RCM: AS/NZS CISPR32; AS/NZS 62368.1; AS/CA S004, AS/CA S040. IC: ICES-003; CS-03 Part V.		
	Warranty: Official Standard including Replacement & Support Facilities		
54	<b>Necessary Accessories, Testing &amp; Installations</b>	Job	1
<b>LAPTOP PART</b>			
55	<b>15.6 Inch Laptop</b>	Nos	5
	Brand: Asus/ Acer		
	Model: Must be mentioned by the Bidder		
	Country of Origin: Taiwan/ Equivalent		
	Processor Brand: Intel		
	Processor Model: Intel Core i3-1315U		
	Generation: 13th Gen		
	Processor Frequency: 1.2 GHz Up to 4.5 GHz		
	Processor Core: 6(Performance-cores-2, Efficient-cores-4)		
	Processor Thread: 8		
	CPU Cache: 10MB		
	Display Size: 15.6 Inch		
	Display Type: LED		
	Display Resolution: FHD (1920 x 1080)		
	Refresh Rate: 60 Hz		
	Display Features: 16:9 aspect ratio, IPS-level Panel, LED Backlit, 250nits, 45% NTSC		
	RAM: 8 GB ON BOARD		
	RAM Type: DDR4		
	Removable: YES		
	Total RAM Slot: 2		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Storage Type: NVMe Pcle		
	Storage Capacity:512GB		
	Extra M.2 Slot: 1x M.2 2280 PCIe 4.0x4		
	Graphics Model: Intel Iris X Graphics Is Only Available In Models With Intel Core I5/I7/I9 Processors And Dual-Channel Memory		
	Graphics Memory: Shared		
	Keyboard Type: Backlit keyboard		
	TouchPad: yes		
	WebCam: HDIM CAMERA		
	Speaker: Built-in speaker		
	Microphone: Built-in array microphone		
	Audio Features: SonicMaster		
	Optical Drive: N/A		
	Card Reader: N/A		
	HDMI Port: 1x HDMI		
	USB 2 Port: 1x USB 2.0 Type-A		
	USB 3 Port: 2x USB 3.2 Gen 1 Type-A		
	USB Type-C / Thunderbolt Port: 1x USB 3.2 Gen 1 Type-C		
	Headphone & Microphone Port: Combo Audio Jack		
	LAN: N/A		
	WiFi:Wi-Fi 5(802.11ac) (Dual band) 1x1		
	Bluetooth: Bluetooth 5.1		
	Camera Privacy Shutter: Yes		
	Operating System: Windows 11 Home		
	Battery Type:3 Cell or better		
	Battery Capacity:42Wh		
	Adapter Type:AC Adapter		
	Color: Any		
	Dimensions: To be mentioned by the Bidder		
	Weight: upto 1.70 kg		
	Body Material: Ensure Durability		
	Warranty Details: 02 years International Limited Warranty (Battery 1 year)		
56	<b>14 Inch Laptop</b>	Nos	15
	Brand: Asus/ Acer		
	Model: Must be mentioned by the Bidder		
	Country of Origin: Taiwan/ Equivalent		
	Processor Brand: Intel		
	Processor Model: Intel Core i3-1315U		
	Generation: 13th Gen		
	Processor Frequency: 1.2 GHz Up to 4.5 GHz		
	Processor Core: 6(Performance-cores-2, Efficient-cores-4)		
	Processor Thread: 8		
	CPU Cache: 10MB		
	Display Size: 14 Inch		
	Display Type: LED		
	Display Resolution: FHD (1920 x 1080)		
	Refresh Rate: 60 Hz		
	Display Features: 16:9 aspect ratio, IPS-level Panel, LED Backlit, 250nits, 45% NTSC		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	RAM: 8 GB ON BOARD		
	RAM Type: DDR4		
	Removable: YES		
	Total RAM Slot: 2		
	Storage Type: NVMe Pcle		
	Storage Capacity:512GB		
	Extra M.2 Slot: 1x M.2 2280 PCIe 4.0x4		
	Graphics Model: Intel Iris X Graphics Is Only Available In Models With Intel Core I5/I7/I9 Processors And Dual-Channel Memory		
	Graphics Memory: Shared		
	Keyboard Type: Backlit keyboard		
	TouchPad: yes		
	WebCam: HDIM CAMERA		
	Speaker: Built-in speaker		
	Microphone: Built-in array microphone		
	Audio Features: SonicMaster		
	Optical Drive: N/A		
	Card Reader: N/A		
	HDMI Port: 1x HDMI		
	USB 2 Port: 1x USB 2.0 Type-A		
	USB 3 Port: 2x USB 3.2 Gen 1 Type-A		
	USB Type-C / Thunderbolt Port: 1x USB 3.2 Gen 1 Type-C		
	Headphone & Microphone Port: Combo Audio Jack		
	LAN: N/A		
	WiFi:Wi-Fi 5(802.11ac) (Dual band) 1x1		
	Bluetooth: Bluetooth 5.1		
	Camera Privacy Shutter: Yes		
	Operating System: Windows 11 Home		
	Battery Type:3 Cell		
	Battery Capacity:42Wh		
	Adapter Type:AC Adapter		
	Color: Any		
	Dimensions: To be mentioned by the Bidder		
	Weight: upto 1.70 kg		
	Body Material: Ensure Durability		
	Warranty Details: 02 years International Limited Warranty (Battery 1 year)		
<b>CONFERENCE SYSTEM</b>			
<b>57</b>	<b>Conference control unit</b>	Nos	1
	Brand: BXB/BOSCH/Sennheiser		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Product Features:</b>		
	Quick installation easy maintenance via CAT 5 E cables		
	Equipped 4 chain RJ 45 ports each port enables the max of 15 units the total is 50 units Via BXB extension power supply, it enables the max of 265 unit connection		
	4 x 20 digits LCD screen showing conferencing modes, the ID of the operating microphones, microphone volume and other configurations.		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Multiple operating modes Normal/Chairman/Override		
	Equipped with RS 232 interface connects with BXB HDS 720 IP Network AV Controller, camera, and other		
	environmental control equipment for system integration		
	Equipped XLR plug, enabling the connection with other recording and audio equipment.		
	Microphone auto off setting 30 45 seconds)		
	Open mic mode or activates the max of 9 microphones at the same time.		
	Hardware Specifications		
	Microphone Link: RJ45 x 4		
	Aux Output: XLR Plug (MONO)		
	Frequency Response: 250 Hz 15K Hz @ + 2dB		
	T.H.C: $\leq 0.15\%$		
	S/N Ratio: $\geq 90\text{dB}@$ Frequency 1KHz		
	RS 232 Connection: D-SUB Male 9 Pin x 1		
	Physical Characteristics		
	Unit Size (WHD): 430 x 100 x 310 (mm)		
	Weight: 4.54kg (adaptor excluded)		
	Operation Temperature: 0°C-40°C		
	Storage Temperature: -15°C-55°C		
	Relative Humidity: 45%-70% (non-condensing)		
	Pneumatic value: 86KPa ~ 106KPa		
	Power Supply		
	Output Voltage: DC 24V		
	Output Rated Current: 6.9A		
	Current Output Rated Power (MAX.): 124W		
	Input Voltage Range: AC90-264V		
	Input Frequency Range: 47~63Hz		
	Standby Current: $\approx 180\text{mA}@$ DC18V		
58	<b>Table-top chairman unit</b>	Nos	2
	Brand: BXB/BOSCH/Sennheiser		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Product Features:</b>		
	Featured with a built-in 2.5" monitor speaker. When the microphone is operated, the speaker would be auto-off to avoid sound feedback.		
	No limitation of chairman unit's quantity; you can also randomly change the position and sequence.		
	Built-in microphone voice sensor for automatic turn-off function.		
	Built-in recording output, simple way to reserve meeting minutes.		
	Built-in headphone output (volume adjustable).		
	Pluggable gooseneck microphone with shield and flexible tube for easy installation and maintenance (length provided: 43/48/56/70cm).		
	Gooseneck microphone with illuminating red ring to indicate speaking status.		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Prevents the interference of electromagnetic wave.		
	Hardware Specifications		
	Connection: RJ45 double port		
	Earphone OUT: $\Phi$ 3.5 stereo x 1		
	Recording OUT: $\Phi$ 3.5 stereo x 1		
	Frequency Response : 100Hz-10KHz		
	Sensitivity: $\geq$ -47dB +3dB		
	Total Harmonic Distortion : $\leq$ 0.15%		
	S/N Ratio: $\geq$ 58dB		
	Max. Input Level: 100dB @ Frequency=1KHz,		
	THD < 5%		
	Physical Dimension		
	Unit Size (D*W*H): 142 x 150 x 65(mm)		
	Weight: 700 g (not including mic)		
	Operation Temperature: 0°C -40°C		
	Storage Temperature: -15°C- 55°C		
	Relative Humidity: 45%-70%(non-condensing)		
	Air Pressure: 86KPa-106KPa		
	Power Supply		
	Supply Voltage: DC 18V		
	Standby Current: $\approx$ 30mA		
59	<b>Table-top delegate unit</b>	Nos	24
	Brand: BXB/BOSCH/Sennheiser		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	Product Feature		
	Featured with a built-in 2.5" monitor speaker. When the microphone is operated, the speaker would be auto-off to avoid sound feedback.		
	No limitation of chairman unit's quantity; you can also randomly change the position and sequence.		
	Built-in microphone voice sensor for automatic turn-off function.		
	Built-in recording output, simple way to reserve meeting minutes.		
	Built-in headphone output (volume adjustable).		
	Pluggable gooseneck microphone with shield and flexible tube for easy installation and maintenance (length provided: 43/48/56/70cm).		
	Gooseneck microphone with illuminating red ring to indicate speaking status.		
	Prevents the interference of electromagnetic wave.		
	Hardware Specifications		
	Connection: RJ45 double port		
	Earphone OUT: $\Phi$ 3.5 stereo x 1		
	Recording OUT: $\Phi$ 3.5 stereo x 1		
	Frequency Response : 100Hz-10KHz		
	Sensitivity: $\geq$ -47dB +3dB		
	Total Harmonic Distortion : $\leq$ 0.15%		
	S/N Ratio: $\geq$ 58dB		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Max. Input Level: 100dB @ Frequency=1KHz, THD < 5%		
	Physical Dimension		
	Unit Size (D*W*H): 142 x 150 x 65(mm)		
	Weight: 700 g (not including mic)		
	Operation Temperature: 0°C -40°C		
	Storage Temperature: -15°C- 55°C		
	Relative Humidity: 45%-70%(non-condensing)		
	Air Pressure: 86KPa-106KPa		
	Power Supply		
	Supply Voltage: DC 18V		
	Standby Current: ≈ 30mA		
60	<b>48cm gooseneck microphone</b>	Nos	26
	Brand: BXB/BOSCH/Sennheiser		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	Uni-directional microphone stem		
	Pluggable/fixed gooseneck microphone		
	Controls and Indicators		
	Red Ring of Light illuminator indicates microphone is active and request-to-speak status (red illuminator is keep flashing)		
	Interconnections:		
	Connector to plug and fasten the microphone with quick screw ring		
	Others:		
	Cartridge Type: Electret		
	Directivity: Unidirectional		
	Frequency Response: 80-16000Hz		
	Polar Pattern: Cardioid		
	Output Impedance: ≤680Ω		
	Sensitivity: -47±3dB(OdB=1V/Pa, at 1KHz)		
	Maximum SPL: 110dB(THD <1%, at 1KHz)		
	S/N Ratio: 60dB		
	Operating voltage: 5-8V		
61	<b>Cat5e cable shielded (STP, FTP). Length:20M</b>	Nos	7
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	Specification shielded (STP, FTP).		
	Length:20M		
62	<b>Cat5e cable shielded (STP, FTP). Length:2.5M</b>	Nos	26
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Specification</b> shielded (STP, FTP).		





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Length:2.5 M		
63	<b>120W Mixer Amplifier</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: USA/EU/Taiwan		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Technical Specification</b>		
	Rated Input: 120W(RMS)		
	180W(MAX)		
	T.H.D: <0.3% (1KHZ)		
	S/N Ratio: >80dB (VR=0)		
	Self-protection Circuit: Power off mute. DC detection		
	Frequency Response: 20HZ~20KHZ±2dB		
	Tone Control: bass±10dB at 100HZ treble± 10dB at 10KHZ		
	Mic Input: 6mV/600Ω/-22dB*4set MIC2 has broadcasting priority function		
	AUX INPUT: 300mV/20KΩ/-10dB* 4set RCA jack		
	Volume Control: Mic independent volume control*4, Aux independent volume control* 4		
	AUX Output: Master volume control output * 1		
	REC output control * 1		
	Speaker output: speaker with * 4		
	100V.70V. 8Ω		
	Warranty for 04(Four) years with Parts & Labor and replacement if needed (For Support and Parts & Labor 24 × 7 × 365 and for parts replacement within 07 days).		
64	<b>Two-way Box Speaker</b>	Nos	2
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	<b>Country of Origin: USA/EU/Taiwan</b>		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Features</b>		
	Rated input: 8Ω/ 20W		
	Sensitivity: 92dB		
	Frequency response: 60~20KHZ		
	Speaker unit: Two-way (6.5" Woofer/ Tweeter)		
	15W 100V Input high voltage transformer is optional		
	Box material: ABS cabinet		
	Equipped with U shape bracket for mounting that any angle is adjustable		
	Warranty: Warranty for 04(Four) years with Parts & Labor and replacement if needed (For Support and Parts & Labor 24 × 7 × 365 and for parts replacement within 07 days).		
65	<b>Network AV Controller</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	Must have IP Camera Control and Setting for look at me feature.		
	Controller should be capable to set and save the preset points of IP Camera and support at least 1011 preset points and		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

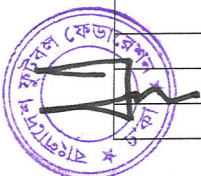
	control the minimum of 4 cameras.		
66	<b>USB HDMI Capture card (Support UVC)</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	HDMI (with 6G audio/video support), HDCP 2.2 and DVI compliant. 1 HDMI input and 4 HDMI outputs Supports System Reset function (CEC active source command) Simultaneous display of a single Ultra High-Definition source on up to 4 UHDTV displays 3D passthrough with compatible 3D source and 3D TV Supports UHDTV resolutions up to 4K2K: 3840×2160@24/25/30/50/60Hz & 4096×2160@24/25/30/60Hz Supports passthrough of high definition audio: LPCM 2/5.1/7.1CH, Dolby Digital 2/5.1CH, DTS 2/5.1CH, Dolby TrueHD, DTS-HD Master Audio & Dolby Atmos HDCP 2.2 and HDCP1.4 compliant HDMI input supports 'Standard' mode and 'TV' mode EDID settings		
67	<b>20x Optical Zoom PTZ Broadcast Camera</b>	Nos	1
	Brand: Lumens/Bosch/Equivalent		
	Model: To be mentioned by the bidder		
	Country of Origin: Taiwan/EU/USA		
	Country of Manufacturing: To be mentioned by the bidder		
	Features:		
	<ul style="list-style-type: none"><li>• 8 Port 10/100 Base-T POE Switch</li><li>• Support IEEE 802.3af POE Standard</li><li>• IEEE 802.1Q Virtual LAN (VLAN)</li><li>• Support Auto Surveillance and Auto Voice VLAN</li><li>• Broadcast, Unicast and Multicast Storm Control</li><li>• Support Smart IP-MAC-Port Binding</li><li>• Support IEEE 802.1p QOS and COS</li><li>• 802.1x port-base Authentication through RADIUS servers</li></ul>		
68	<b>16-Port Layer 2 Smart Managed Fast Ethernet Switch</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
69	<b>19U Rack for mounting conferencing device:</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
70	<b>75" E-Board With Touch Screen: Display Panel</b>	Nos	1
	Brand: To be mentioned by the bidder		
	Model: To be mentioned by the bidder		
	Country of Origin: To be mentioned by the bidder		
	Country of Manufacturing: To be mentioned by the bidder		
	<b>Key Features</b>		
	Must supports at least 20 Points Touch and 10 Points writing		
	4K UHD Display		
	Instant Whiteboard & Lesson delivery software for Interactive productive meeting		
	Intuitive Writing facility		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

Anti-Glare glass & Tempered for a comfortable view		
Annotation on any input source		
Multiple Tools support		
Easy export with Cloud Storage Facility		
Specification		
Display:		
Size (Diagonal) : 75" inch		
Touch Sensor: Infrared (IR)		
Multitouch Capabilities: Upto 40 touch points or higher		
Screen Level: A		
Brightness : 430 cd/m2 or higher		
Resolution : 4K (3840 x 2160)		
Contrast Ratio : 6000: 1 or higher		
Response Time : Minimum $\leq$ 5ms		
Touch Tool: Finger, Gesture, Stylus		
Display Colours : 1.07 billion (10 bit)		
Viewing angle : 178 degree (H/V)		
Low Parallax : Dry bonding with maximum 1 mm Air Gap		
Built-in Android version : Android 8.0 or higher		
CPU : A73 x 2 + A53 x 2 or better		
ROM : 32GB or higher		
RAM : 4GB or higher		
Dual-tasking in split view : Required		
AES 128 Bit encrypted screensharing software for BYOD		
Compatible with wireless screen sharing dongle		
Touch Technology : Infrared Recognition		
Touch Point : Min. 20 touch points		
Touch accuracy : '+/- 1.5mm or better		
Surface Hardness : Toughened Glass with Level 7 of MOHS Standard		
Built-in Speakers : Minimum 12W x 2 Speakers		
Wireless screen sharing from phones, tablets, PCs or Macs to the IFP		
Single Wifi Module for both Android and Windows		
WiFi Version Supports - 802.11 a/b/g/n/ac		
Panel should make its own Hotspot and support Airplay function		
HDMI input 3 (HDMI2.0 - 4k@60Hz) : 3 or more		
HDMI Output Port : 1 or more		
VGA IN : 1 or more		
USB 2.0 Port : 3 or more		
USB 3.0 Port : 3 or more		
Touch Out Port : 2 or more		
Audio IN : 1 or more		
Audio OUT : 1 or more		
SPDIF : 1 or more		
RS232 : 1 or more		
RJ45 : 1 or more		
The Panel should be slim design with thickness of 88mm or less		
<b>In-built Intel PC Module 8th Gen with 120 pin connector</b>		
Memory : 128GB SSD or above		
RAM : 4GB or higher		







# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	Pre installed OS : Windows 10		
	<b>Mandatory features:</b>		
	Intelligent hand writing recognition		
	Writing option with pens of different colours simultaneously		
	Dual Pen Dual Colour		
	Instant stickers for building reminders		
	Smart table features - building table by just sliding fingers;		
	add row & column; automatically adapt height and width of each cell etc.		
	Screen recording, 4 split view, Air class, lock screen		
	<b>Eye care mode feature :</b>		
	Content building software for lesson preparation :		
	Simple divide, Multiple divide, Key points match, Group Race, True/False, Mind Map, Flow Chart, Pie chart, Line Chart, Column Chart, Periodic Table, Poetry preparation		
	Built-in 3D Solar System covering 9 Planets		
	Able to run multitasking in android platform		
	Cloud Based Platform - No local server set up		
	Inbuilt wireless receiver and supports the wireless dongle for wireless presentation		
	Emergency Notification- Publish specific emergency image on panel and freeze the panel until power off		
	<b>Interactive Classroom :</b> Intelligent AI based writing pen, Built-in Voting System for student		
	<b>Remote Management Software :</b> Ability to manage & maintain all deployed IFPs connected over LAN/WAN, including the functionality of		
	1. Turn on/off the panel,		
	2. Change input/ volume,		
	3. Broadcast message to the panel,		
	4. Remote monitoring of the panel desktop.		
	<b>Content Management :</b>		
	Ability to create and edit video professionally		
	Ability to export recording as .mp4 file		
	<b>PQ Conditions:</b>		
	<b>OEM should have a minimum global average turn over of a value equivalent to BDT 2,000 crore during last three years.</b>		
	<b>OEM should have been in operation for atleast 12 years</b>		
	<b>The Manufacturer / OEM must have 9001:2008, ISO 27001, ISO 14001:2015 and OHSAS- 18001:2007, CE, FCC, OHSAS, ROHS, CMMIK Level3 Certification.</b>		
	<b>Cluster Update of Panel Firmware :</b> Panel Firmware should be able to update from a centralized platform		
71	<b>Cat6 U/UTP LSZH Cable</b>	Nos	1
	Copper Cable Type: Cat 6 U/UTP LSZH Cable 250 MHz		
	Brand: SIEMON/R & M/Rosenberger/CommScope/Nexans		
	Part Number: To be mentioned by the bidder		
	Country of Origin: EU/USA		
	Type of cable: U/UTP		
	Outer sheath: LSZH		
	Conductor cross-section (AWG): 23		
	10baseT Ethernet		
	· 100baseTX Fast Ethernet		



# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

	· 1000baseTX Gigabit Ethernet		
	· 155 MBit ATM		
	· 622 MBit ATM		
	· 1.2 Gbit ATM		
	Standard: ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.		
72	<b>Accessories like HDMI, Patch Cord, Connector etc.</b>	Nos	1
73	<b>Installation</b>	Nos	1

### Documents:

The Offer needs to be accompanied with the following documents:

- Company Profile/Background.
- Copy of TAX Registration
- Trade License
- BIN
- Statement of capacity outlining existing expertise and the capacity in the area asked for.
- List of Existing Clients with an engagement of work details/ Work Experience.
- The project focal point and team set up and availability.
- Financial proposal with Breakdown (Bidder own template).
- Technical Proposal.
- Warranty Statement.
- Bidder must provide MAF/MAL from OEM for all kind of imported products.
- ISO certification of the tenders.
- Submit minimum 3 Workorder/ Purchase Order of each above 1.00 Crore.
- Certification of expertise from network-security, server-storage, surveillance, conference system and CDFOM.

**Note: The Bidder bears all costs incurred in the preparation and submission of tender responses.**

### Currencies of Bid and Payment:

- All prices quoted in BDT. (Including applicable VAT and TAX)
- BFF standard payments terms are 30 days from receipt of an approved invoice
- Payment will be paid in phase after mutual discussion and pattern of the delivery.

### Bid Validity:

- Bids shall remain valid for a period of minimum of 120 days after the date of the submission deadline as prescribed by Bangladesh Football Federation. If a bid is valid for a shorter period the Bangladesh Football Federation is entitled to reject the bid.

In exceptional circumstances, prior to the expiration of the bid validity period, the Bangladesh Football Federation may request Bidders in writing to extend the period of





# বাংলাদেশ ফুটবল ফেডারেশন

## BANGLADESH FOOTBALL FEDERATION

validity of their bids. A Bidder must confirm in writing his acceptance of the extension. In case extension, modification of the bid is not permitted.

### Language of Bid:

All Bids must be submitted in English.

### Confidentiality:

- Information relating to the examination, evaluation, comparison of bids, and recommendation of contract award will not be disclosed to bidders or any other persons not officially concerned with such process until the Contract has been awarded.
- Any effort by a Bidder to influence the Bangladesh Football Federation in the examination, evaluation, comparison of the bids or contract award decisions may result in the rejection of its bid.
- From the time of bid opening to the time of Contract award, if any bidder wishes to contact the Bangladesh Football Federation on any matter related to the bidding process, this must be done in writing.

### Submission Procedure & Deadline:

- The Product offer must be submitted at the BFF Office at BFF House, 14/B Toyenbee Circular Road, Motijheel C/A, Dhaka-1000, Bangladesh during office hours (between BST 1000 to BST 1400) on or before **16 October 2024** and should be in a sealed envelope to be addressed to: **General Secretary, Bangladesh Football Federation** and **Attention to: Manager-Procurement & Admin**, Bangladesh Football Federation.

### Evaluation of Bid:

- The Bangladesh Football Federation shall examine all documentation and other information submitted by Bidders to verify eligibility, and then will review and score bids according to the defined criteria for this tender.
- Bangladesh Football Federation reserves the right to reject all bids, and re-tender if no satisfactory bids are submitted. BFF under no obligation to award the contract or to award it to the lowest bidder.

### Award Procedure:

- The Bangladesh Football Federation (BFF) may, unless the Bidder expressly stipulates to the contrary in the tender, accept whatever part of a tender that BFF so wishes.
- The Bangladesh Football Federation shall award the Contract in writing, by email, to the Bidder(s) whose offer(s) has been determined to be the best, before the end of the bid validity period.
- On request BFF shall give any unsuccessful bidder feedback on its tender and reasons why its tender was rejected. This information shall be provided within 15 days from (but not including) the date on which BFF receives the request for feedback.

### Notification of Award:

- The email from BFF to the Bidder(s) alerting them of the fact that they have been successful will state the sum that the Bangladesh Football Federation will pay the Provider in consideration of the provision of goods and/or services as prescribed in the Invitation to Tender and in accordance with their bid.
- Bidder is thereafter required to reply to email, confirming their wish to proceed The with a contract.





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## BANGLADESH FOOTBALL FEDERATION

### Signing of Contract:

- The Bangladesh Football Federation shall call the successful Bidder(s) to sign the contract(s) and term of Reference once finalised.
- Within an agreed timeframe, the successful Bidder(s) shall sign, date and return the contract(s) to the Bangladesh Football Federation.

**General Secretary**

Bangladesh Football Federation  
BFF House, 14/B Toyenbee Circular Road  
Motijheel C/A, Dhaka-1000.

