(a). Switch Managed, 24-Ports 10/100Base-TX, Layer-2 Switch:

Brand	Internationally Reputed Brand
Model	To be Mentioned by bidder
Country of origin	To be Mentioned by bidder
Type	Managed, Layer-2

Product/Performance Specifications:

Ports	24-ports 10/100 Base-T with support for 2 Combo Gigabit Ethernet ports
MAC Address Table size	Minimum (10 – 16) K MAC
Memory Buffer	24 Kbytes per 10/100Mbps port, 96 Kbytes per 1000Mbps port.
Switch Capacity	Minium. 56 Gbps Capacity
Transmission Method	Store-in forward
Throughput	Min. 41Gbps
Memory	128 MB;
VLANs	Supports upto 4096 VLAN Groups
Jumbo Frames	Minimum 9K (9216) bytes

Interface:

RJ-45	10 Base-T, 100Base-TX & 1000Base-T, Cables: UTP cat-5/cat-6

Network Management:

In Band & Out of Band	Telnet, CLI/console, RMON, Web-based HTTP, SNMP compatible & port mirroring

Electrical and Electrical Emissions:

Emissions	FCC Class A, CE Class A
Power Supply	100-240 VAC, 50/60 Hz Internal universal power.

Safety Agency Certifications:

Safety	CSA, NRTL/C

Environmental:

Temperature	Operating: 0 – 50 C (32 – 122 F)
Storage	-25 – 55 C (-13 – 131 F)
Humidity	Operating 5% - 95%
Warranty	01 (one) year spare part and 02(two) years Free service.

b) Switch Unmanaged, 24-Ports 10/100Base-TX, Layer-2 Switch:

Brand	Internationally Reputed Brand
Model	To be Mentioned by bidder
Country of origin	To be Mentioned by bidder
Type	UnManaged, Layer-2

Product/Performance Specifications:

Ports	24 10/100/1000 Mbps LAN Ports
Mount Type	Rack Mount
MAC Address Table size	Min. 8K
Jumbo Frames	Minimum 9216 bytes
Switch Capacity/ Fabric	Min. 48 Gbps switching fabric
Transmission Method	Store-in forward

Interface:

RJ-45	10Base-T, 100Base-TX & 1000Base-T, Cables: UTP cat-5/cat-6

Electrical and Electrical Emissions:

Emissions	CE Class B
Power Supply	100-240 VAC, 50/60 Hz Internal or universal power.
Warranty	01 (one) year

(C). Network Accessories

1. UTP Cable	Cat-6, Brand: Internationally Reputed Brand
2. Connector	RJ-45, Brand: Internationally Reputed Brand
3. Moduler	Wall Mounted Single port Complete set. Brand: Internationally Reputed Brand
4. Warranty	3 Years (01 year Full. 2nd & 3rd year service only).

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BANGLADESH RURAL ELECTRIFICATION BOARD (BREB)
PEOPLES REPUBLIC OF BANGLADESH
STANDARD FOR ROUTER

Router (Type 1):

Brand	International Reputed Brand.
Model	To be Mentioned by bidder
Country of origin	To be Mentioned by bidder
CPU Speed	Minimum 680 MHz
RAM/Memory	Minimum 256 MB DDR SDRAM onboard memory
Boot loader	RouterBoot
Data Storage	512MB onboard NAND memory chip
Ethernet	Five 10/100/1000 Mbit/s Gigabit Ethernet
Serial Port	One DB9 RS232C asynchronous serial port
LEDs	Power and User LED
Beeper	Present
Power	Power over Ethernet: 14...28V
Temperature	Operational : -20^{0}C to +65^{0}C
Power Consumption	Operational : up to 70% relative humidity
Warranty	3 Years.