Passive networking equipments for AB-2 Building and Campus OFC backbone.

SNo.	Particulars	Quantity	Unit	Rate	Amount
1	Cat-6A, 4 Pair Shielded Cable Roll (of 500 meter length)	8	Nos.		
2	Cat-6 Information Outlet with with Face Plate and Gang-Box		Nos.		
3	24 Port Cat-6 Jack Panel (fully loaded)	30	Nos.		
4	Cat-6 Patch Chord (1 meter length)	600	Nos.		
5	Cat-6 Patch Chord (3 meter length)	600	Nos		
6	Cat-6 Patch Chord (5 meter length)	50	Nos		
7	Cat-6 UTP Cable Roll (of 305 meter length)	90	Nos.		
8	12U Wall Mountable Rack with 6 socket PDU, Fans with Fan Tray& H/w Packet and other std accessories	10	Nos.		
9	RJ-45 Connectors (Pack of 100)	2	Nos.		
10	SC-LC Style LSZH Single mode 9/125 micron Duplex Patch Cord (3 meter length)	140	Nos.		
11	SC-LC Style LSZH Single mode 9/125 micron Duplex Patch Cord (10 meter length)	70	Nos.		
12	SC-SC Style LSZH Single mode 9/125 micron Duplex Patch Cord (3 meter length)	10	Nos.		
13	SC-SC Style LSZH Single mode 9/125 micron Duplex Patch Cord (10 meter length)	10	Nos.		
14	SC-SC Single mode Duplex Fiber Optic Coupler	90	No.		

**BOQ** 

#### **Note for the Bidder:**

- 1. All Passive Components should be from the same OEM except Rack, Gang Box and RJ45 Connectors
- 2. The OEM should be ISO 9001:2000 & QS: 9000 Certified. In the changing needs of the global resources if the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage.
- 3. Each OEM can make only one bid. A certificate of authorization from the OEM specific for this tender must be submitted with the bid. In case multiple authorized bids are received from an OEM, all such bids will be disqualified.
- 4. Technical bid should accompany the Part Number, model number of the quoted items along with data sheets.
- 5. Rates quoted should be valid for minimum of six months after issuing of purchase order

### **Specification Sheet**

#### (Item No. 1)

# Cat-6A, 4 Pair Shielded Cable Roll (of 500 meter length)

1	Category 6A, 4 Pair Shielded Cable		
	Min. Required Specification		
1.1	Category 6A shielded Twisted Pair 4 pair cable shall be compliant with ANSI/TIA/EIA-568-C.2		
1.1	for supporting 10G applications		
1.2	Conductor Size : 23 AWG		
1.3	Screen: Each pair or All Pair enclosed in laminated Aluminum foil with drain wire.		
1.4	Screen material: Laminated Aluminium		
1.5	Drain Wire material: tin-coated copper		
1.6	Sheath Type: Low Smoke Zero Halogen (LSZH)		
1.7	1.7 Pulling Force: 50 N/mm2 max		
1.8	Capacitance: 40 pF/m nom. @1 KHz		
1.9	DC Resistance: 72 Ω/Km max.		
1.10	Propagation Delay Skew: 45 nS/100 max @ 1-500 MHz		
1.11	Mean Impedance: $100\Omega \pm 6$ @ 1-500 MHz		
1.12	Commercial Standards :ANSI/TIA/EIA-568-C.2 and ISO/IEC 11801 A1.1		
1.13	Should Have ETL verified to TIA/EIA-568-C.2 Category 6A standard (ETL certificate to be		
1.13	enclosed along with the bid)		
1.14	Transmission Properties and Electrical Specifications tested minimum upto 500 Mhz and		
1,17	verified by ETL		
1.15	Bidder to submit Cat 6A channel report verified by ETL		
1.16	6 Should Have performance warranty of 20/25 years		

#### (Item No. 2)

### Cat-6 Information Outlet with with Face Plate and Gang-Box

В	Cat 6 Information Outlet with Face Plate and Gang Box Complete		
B.1	Category 6, EIA/TIA 568-C.2		
B.2	Use insulation displacement connectors		
B.3	All information outlets for 100 W, 22-24 AWG copper		
B.4	Should have shutter on I/O		
B.5	Should have Plastic Housing: Polycarbonate, UL94V-0 rated or equivalent		
B.6	Contact Plating: 50 µinches gold over 100 µinches nickel		
B.7	Operating Life: Minimum 200 Re-terminations		
B.8	Single Gang square plate, 86mmx86mm		
B.9	Plug in Icons – Icon tree – to be supplied with plate		
B.10	Write on labels in transparent plastic window – supplied with plate		

### (Item No. 3)

# 24 Port Cat-6 Jack Panel (fully loaded)

C	24 PORT CAT6 Jack Panel	
C.1	Should Be made of cold rolled steel	
C.2	Should conform to TIA / EIA 568-C.2 Component Compliant	
C.3	Should terminate 24 UTP CAT 6 (4 pair) Cables	
C.4	Ports should be with individual dust cover.	
C.5	Should confirm to EIA/TIA 568A wiring Pattern	
C.6	Should have labeling strips for identification.	
C.7	Should have individual bend limiting boots /caps on Information Outlets on the back.	

# (Item No. 4, 5 & 6)

#### **Cat-6 Patch Chord**

D	Patch Chords (1 meter, 3 meter and 5 meter length)	
D.1	Should be 4 Pairs 24 AWG copper cables.	
D.2	The Outer Jacket should be Low Smoke Zero Halogen.	
D.3	24 AWG stranded bare copper	
D.4	Should minimum comply with proposed ANSI/TIA/EIA-568-C.2	
D.5	Should be verified by ETL (ETL certificate to be enclosed with the Bid)	
D.6	UL listed (UL certificate to be provided along with the Bid)	
D.5	Should Have cross separator	

### (Item No. 7)

# Cat-6 UTP Cable Roll (of 305 meter length)

A	Category 6 UTP Cable	
A.1	Category 6 Unshielded Twisted Pair 100W cable shall be compliant with EIA/TIA 568-C.2	
A.2	Should be 4 pair, 23 AWG	
A.3	Cable should be CM rated	
A.4	Cable Should Have Internal cross separator	
A.5	Jacket: LSZH (Low smoke zero halogen)	
A.6	Conductor: Solid Copper	
A.7	All the Cat6 cabling components should be tested and verified by ETL with data transmission	
11.7	frequencies min 250 MHz or higher.	
A.8	Should have performance warranty for 20/25 years	

### (Item No. 8)

### 12U Wall Mountable Rack

12U Wall Mountable	19" wall mountable standard racks with minimum 500mm depth and 12U height
Racks	with front glass door, closed on all sides, lock and key, 2 cable management
	panels, 2 fans and 6 socket power supply strip with spike buster preferably of
	make: PRESIDENT / APW / RITTAL / EMERSON etc.

### (Item No. 9)

# RJ-45 Connectors (Pack of 100)

<b>RJ-45 Connectors</b>	For Cat5/Cat5e/Cat6 Networking Cable end connections for directly connecting
(Pack of 100)	network equipments, Should be directly punchable using RJ-45 crimping tool
	without any separator. Should be of brands equivalent to Digi-Link etc.

### (Item No. 10 & 11)

# SC-LC Style LSZH Single mode 9/125 micron Duplex Patch Cord

SNo.	Specifications	Requirement
1	Make and Type	SC to LC Duplex Fiber Optic Patch Cord Single Mode OS2, 3 Mtr, 9/125 Micron
2	Cable Sheath	LSZH
3	Ferrule	Ceramic
4	Buffer Diameter	900 micron meter
5	ROHS	ROHS/ELV Compliant

### (Item No. 12 & 13)

# SC-SC Style LSZH Single mode 9/125 micron Duplex Patch Cord

SNo.	Specifications	Requirement
1	Make and Type	SC to SC Duplex Fiber Optic Patch Cord Single Mode OS2, 3 Mtr, 9/125 Micron
2	Cable Sheath	LSZH
3	Ferrule	Ceramic
4	Buffer Diameter	900 micron meter
5	ROHS	ROHS/ELV Compliant

### (Item No. 14)

### SC-SC Single mode Duplex Fiber Optic Coupler

Characteristic	Min. Required Specification
Features	All SC adaptors/couplers should be duplex type with
	shutter/dustcover. Adapters should be snap mount for easy
	insertion and removal.