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No. NITS/PS-623/LAN & Wi-Fi/18/CORRIGENDUM/

Date: 15-10-2018

CORRIGENDUM

Sub. : Amendment in Technical Specification of required item.

Ref. : Tender No. NITS/PS-623/LAN & Wi-Fi/18, dtd.13.10.2018,

Pre Bid Meet. 31.10.2018, LOS-16.11.2018

Some modification has been made in the Technical Specification of required items of the above referred tender. Modified Technical Specification with details of the above tender are as follows. Consider only these technical specifications.

N.B.: All the Terms & Conditions of the tender has been remain UNCHANGED.


Registrar
कुलसचिव

National Institute of Technology Silchar
राष्ट्रीय प्रौद्योगिकी संस्थान सिलचर
Assam, India
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TECHNICAL SPECIFICATION

A. 6 Fiber SM Outdoor armored Cable/(4 or 6) core SM indoor Fibre, G652.D

Sr No.	Specifications	Requirement
1	Cable Type	06F MULTITUBE OUTDOOR ARMOURED OPTICAL FIBER CABLE - DRY
2	Fiber Type	Single Mode, 9/125/250 micron primary coated buffers, OS2 (ITU T G652.d)
3	Armour (for outdoor only)	Electrolytically Chrome-Coated Steel (ECCS) Armor of min. 0.15 mm thickness
4	Cable Construction Type	BELLCORE GR 20 / IEC 794-1
5	Attenuation	@ 1310nm <=0.34 db/Km MAX
		@1550nm <=0.22 db/Km MAX
		@ 1380-1386nm <= 0.31db/Km
6	Cut Off Wave length (nm)	<1260
7	Point Discontinuity (db)	<= 0.1
8	Chromatic Dispersion @ 1310nm (ps/nm x Km)	<=3.5
9	Chromatic Dispersion @ 1550nm (ps/nm x Km)	<=18
10	Core/Mode-Field (um)	9
11	Clad Diameter (um)	125
12	Coat Diameter	250
13	Loose tube material	PBTP Loose tubes dry. 1 nos containing fiber cores and 5 nos filler tubes arranged around a central FRP rod (for outdoor).
14	Loose Tube Color	Blue
15	Loose tube diameter (Nominal)	2.4 mm
16	Loose tube filling	Water swellable threads
17	Fiber Identification	BLUE, ORANGE, GREEN, BROWN, GRAY & WHITE
17	Jacket material	FR HDPE outer jacket
18	Jacket thickness	2 mm Min.
19	Strength members	Water Swellable tape at the periphery of the multiple loose tube arrangement. Water swellable yarns arranged between tubes.
		Central FRP rod strength member around which the loose tubes should be arranged symmetrically
20	Tensile Force	2500 N
21	Cable Weight	150 Kg/Km
22	Cable Outer Diameter	<= 13.2 mm

B. Fiber Management Shelf, LC type Rackmount, 1U

Sr No.	Specifications	Requirement
1	Fiber Management shelf	1U 19" rack mountable
		The fiber management shelf series should be ideal for high density front patching applications.
		Should have Compact design and high density capacity to deliver carrier class fiber management to central offices, Pops, FTTx, mobile systems and LANs.
		High Density:
		1U: 6 / 12 / 24 Fiber terminations
		Shall be factory fitted with LC SM adapters, LC-PC SM pigtailed, splice trays, protector sleeves and fiber management rings, with zero assembling required during installation
		Shelves shall be available and compatible with all connector types
		Mounting brackets can be placed in different positions
2	Material	Min 16 gauge steel
3	Drawer shelf features	Easy access to splicing tray
		Easy access to back side of connector
4	Accessories	Fiber management guides, radius controls & secure tie downs to be integrated in the shelf for better cable management
		Should be preloaded with grounding kits and earthing lugs. Labeling strip for adhesive labels.
5	Cable Inlets	Cable inlets should be secured from dust and dirt penetration
6	Material	Min 16 gauge steel
7	Pigtails loaded in Shelf:	
i	Type	LC-PC Type, SM 1.5 Mtr.
ii	Attenuation	<=0.3 dB
iii	Return Loss	>= 45 dB
iv	Cable Info	9/125 um
v	Outer Dia	0.9 mm
vi	Buffer material	LSZH
vii	Buffer Color	White
viii	Strippability	Semi tight
9	Warranty	25 years on component and performance
10	Compliance	ROHS / ELV Compliant

C. 6/12/24 Fiber LIU (with pigtail), SCAPC type Loaded, Rack-mount

- a. It should be loaded with 6/12/24 nos. of SCAPC Pigtails and SCAPC adapters, 2 nos of splice trays of 6/12/24 fiber capacities. The splice trays should be hinged on a tower so that lower trays can be easily accessible. The splice tray should have the following dimensions in mm – 225(L) x98(W).
- b. A tray wedge should be supplied along with the kit for ease of working on the lower trays.
- c. The adapter plates should be suitably identified with adapter numbering.
- d. The kit supplied should contain at least 30 fusion splice protectors, 20 nos of cable ties, suitable quantity of foam tape and hose clamps.
- e. There should be a provision to store the loop of loose tube.
- f. The fiber cable should be fixed to the body with hose clamps and there should a provision for strength member attachment.
- g. The rails used should be self-locking type so that there is no possibility of the drawer moving forward accidentally.
- h. The top cover should be removable type, no tools should be required to open the top cover.

- i. Optical Performance: Insertion Loss: $\leq 0.3\text{dB}$
Return Loss: $\geq 60\text{dB}$

D. LC-LC Fiber Patch Cord, SM

Sr No.	Specifications	Requirement
1	Make and Type	LC/PC to LC/PC Duplex tuned Fiber Optic Patch Cord 9/125 Micron
2	Cable Sheath	LSZH
3	Cable Diameter	1.8 mm twin zip
4	Ferrule	Ceramic
5	Buffer	Tight buffered
6	Insertion Loss	MAX .3 db
7	Return Loss	> 45 db
8	Temperature Range	-10 Degree C to +60 Degree C
9	ROHS	ROHS/ELV Compliant
10	Warranty	25 Years
11	Length	1 Mtr, 3 Mtr, 5 Mtr, 10 Mtr, 15 Mtr

E. CAT6 UTP Jacks with Face Plate and Back Box

Sr No.	Specifications	Requirement
1	Type	PCB based, Unshielded Twisted Pair, Category 6, TIA /EIA 568-C.2 and ISO/IEC 11801
2	Modular Jack	750 mating cycles
3	Wire terminal	200 termination cycles
4	Accessories	Integrated bend-limiting strain-relief unit for cable entry
		Support cable pair termination process on the jacks at 90 degree angle. Bidder should have a mechanism to maintain the quality of the termination in respect of the skill level of the termination staff.
5	Housing	Polyphenylene oxide, 94V-0 rated.
6	Blocks	Polycarbonate, 94V-0 rated
7	Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate
8	Wiring blocks	Polycarbonate, 94V-0 rated
9	Approvals	(a) UL Listed / CSA Approved
		(b) ETL verified to TIA / EIA Cat 6
10	Performance characteristics @ 250 MHz	Insertion Loss : 0.10dB NEXT : 47.9dB FEXT : 40.1dB Return Loss : 46dB
11	ROHS Compliant	ROHS/ELV Compliant
12	Warranty	25 years on component and performance
13	Faceplate	Single port British Style 86 x 86 mm shuttered, White. Should be supplied with labeling strips and label covers.

