

**Check List which is to be enclosed along with Tender No: 12/10-11 dated 30-06-2010**

(Voice, data cabling for campus network)

**If the specification/values is different from what is been asked, please mention in detail**

Sl No	Item	Specification	Vendor's compliance
1	Floor mountable rack, 19 inch 42U 1000mm Depth, Ventilated, with power strip, cable manager and all accessories	<ul style="list-style-type: none"> <li>• 42U,19" (Specify dimensions in WxDxH)</li> <li>• Does the Cabinet conform to DIN 41494 or EIA 310D standards? (Yes/No)</li> <li>• Should be able to dismantle and reassemble at the site. (Yes/No)</li> <li>• CRCA Should be "IS 513 Gr D" standard. (Yes/No)</li> <li>• Fully adjustable 19" equipment mounting angles. (Yes/No)</li> <li>• Product to be ROHS Complaint (Yes/No)</li> <li>• Manufacturer should be ISO certified. (Yes/No)</li> <li>• Removable side panels with indents and slam latch (Yes/No)</li> <li>• Top and bottom cover for cable entry (Yes/No)</li> <li>• 19" mounting angles fixed front and rear accessible (Yes/No)</li> <li>• Door, steel 600w, 42u hex prf ful doors, steel with hexagonal perforation (perforation percentage 70%) (Yes/No)</li> <li>• KB tray, rotary, 19"/1000d+slides" tray for the keyboard (Yes/No)</li> <li>• HRDWRE,FRNT PNL,SQR,PKT of 20nos packet hardware to fix the rack mount equipments</li> </ul>	

		<p>(Yes/No)</p> <ul style="list-style-type: none"> <li>• Castors med duty 4 nos per set each rack. set 2 with foot brake, 2 without brakes (Yes/No)</li> <li>• Fan tray ,door mtg, 2 posn fan on the door position (Yes/No). Specify numbers also.</li> <li>• Fan 230v, 90cfm fans for exhaust (Yes/No) Specify numbers also.</li> <li>• AC main chnl 42u/ (14x5a) (Yes/No)</li> <li>• Manufacturing as per ISO 14001 - 2004(Yes/No)</li> </ul>	
2	Wall mounting rack, 19 inch 12U, Ventilated, with power strip, cable manager and all accessories	<ul style="list-style-type: none"> <li>• Specify size in WXDXH</li> <li>• Front glass door with lock &amp; key (Yes/No)</li> <li>• No: of fans and working voltage &amp; cfm</li> <li>• Power strip (No : of sockets)</li> <li>• Cable manger 1u 19” mtg (Yes/No)</li> <li>• CKD type completely knock down condition(Yes/No)</li> </ul>	
3	Fiber Light Guide Interconnect Unit (LIU) 24 Port	<ul style="list-style-type: none"> <li>• Rack mount with 1U height (Yes/No)</li> <li>• No: of SC-SC duplex adapters</li> <li>• Provision for fiber management, earthing lugs, splicing tray with sleeves, moon cable routing and other accessories. (Yes/No)</li> <li>• Panel cover should be slide out (front sliding) for easy maintenance (Yes/No)</li> </ul>	

		<ul style="list-style-type: none"> <li>Specify Dimensions(WxDxH)</li> </ul>	
4	Fiber Panel Rack Mount Type / wall mount type - 06 Port	<ul style="list-style-type: none"> <li>Rack mount / wall mount with 1 U height (Yes/No)</li> <li>No: of SC-SC duplex adapters</li> <li>Suitable for 19" Rack Mountable cabinet/ wall mountable (Yes/No)</li> <li>Allow minimum two cable entries (Yes/No)</li> <li>Specify dimensions (W*D*H)</li> <li>Specify Dimension-Sliding LIU (W*D*H)</li> </ul>	
5	Coloured CAT6 UTP 24 Port Rack Mount Jack Panel with Cable Manager	<ul style="list-style-type: none"> <li>110 wiring block at rear end &amp; RJ 45 jack on front panel (Yes/No)</li> <li>The IDC should have 45 degree contact (Yes/No)</li> <li>19" rack mountable (Yes/No)</li> <li>It should have integrated in-built shutter with zero foot print. (Yes/No)</li> <li>should conform or exceed the EIA/TIA 568 B.2-1 standards for CAT6 (Yes/No)</li> <li>Metallic, high strength &amp; 1U height, should have routing rings, ties, labeling strips for identification (Yes/No)</li> <li>No. of mating cycles (Min 750)</li> <li>No. of termination cycles (Min 200)</li> <li>Jack contacts - Phosphorous bronze, plated with</li> </ul>	

		1.27micro-meter thick gold (Yes/No)	
6	Coloured CAT6 UTP 48 Port Rack Mount Jack Panel with Cable Manager	<ul style="list-style-type: none"> <li>• 110 wiring block at rear end &amp; RJ 45 jack on front panel (Yes/No)</li> <li>• The IDC should have 45 degree contact (Yes/No)</li> <li>• 19" rack mountable (Yes/No)</li> <li>• It should have integrated in-built shutter with zero foot print. (Yes/No)</li> <li>• should conform or exceed the EIA/TIA 568 B.2-1 standards for CAT6 (Yes/No)</li> <li>• Metallic, high strength &amp; 1U or 2U height, should have routing rings, ties, labeling strips for identification (Yes/No), Specify height</li> <li>• No. of mating cycles (Min 750)</li> <li>• No. of termination cycles (Min 200)</li> <li>• Jack contacts - Phosphorous bronze, plated with 1.27micro-meter thick gold (Yes/No)</li> </ul>	
7	Coloured CAT6 UTP Patch Cord (factory crimped) - 1/0.5 mtr with marker ties	<ul style="list-style-type: none"> <li>• Should conform or exceed the EIA/TIA 568 B standards for CAT 6 Factory molded boots on RJ 45 plugs at both ends (Yes/No)</li> <li>• Compliance with Cat 6 standards of ISO/IEC 11801, EIA/TIA 568, EN50173 and UL, ETL,3P (Yes/No)</li> <li>• Length (1m/0.5m)?</li> <li>• Should have flexible Molded Boot. (Yes/No)</li> <li>• Phosphor Bronze, 50 micron</li> </ul>	

		<p>gold plating over selected area and gold flash over remainder, over 100 micron nickel underplate(Yes/No)</p> <ul style="list-style-type: none"> <li>• 24 AWG 7 / 32, stranded copper (Yes/No)</li> </ul>	
8	CAT6 UTP Patch Cord (factory crimped) - 3 mtrs	<ul style="list-style-type: none"> <li>• Should conform or exceed the EIA/TIA 568 B standards for CAT 6 Factory molded boots on RJ 45 plugs at both ends (Yes/No)</li> <li>• Compliance with Cat 6 standards of ISO/IEC 11801, EIA/TIA 568, EN50173 and UL, ETL,3P (Yes/No)</li> <li>• Length (3m)?</li> <li>• Should have flexible Molded Boot. (Yes/No)</li> <li>• Phosphor Bronze, 50 micron gold plating over selected area and gold flash over remainder, over 100 micron nickel underplate(Yes/No)</li> <li>• 24 AWG 7 / 32, stranded copper (Yes/No)</li> </ul>	
9	Angular Face Plate with Cat-6 Keystone I/O – Single/Double Socket with wall/back box	<ul style="list-style-type: none"> <li>• Shuttered flush mount wall plate to hold Keystone jack Cat 6 modules (Yes/No)</li> <li>• Screw cap design for better looking fronts (Yes/No)</li> <li>• Suitable for use with all RJ45 installations including CAT 5, CAT 5e and CAT 6. (Yes/No)</li> <li>• Single wall plate, fits on to a single gang wall box and has space for one/two RJ45 sockets. (Yes/No)</li> <li>• The Face Plate should have a icon symbol for Data/Voice. (Yes/No)</li> <li>• It should have Angular Entry type. (Yes/No)</li> </ul>	

		<ul style="list-style-type: none"> <li>• Single Gang (Yes/No)</li> <li>• Moulded PVC-U (Yes/No)</li> <li>• Tough shatter resistant PVC (Yes/No)</li> <li>• Cat 6 Keystone Jack ( Female RJ45 Jack ) (Yes/No)</li> <li>• Cat 6 Keystone Jack should bend limiting wire retainer. (Yes/No)</li> <li>• Performance to met TIA/EIA-568-B.2-1 specifications (Yes/No)</li> <li>• No. of mating cycles (Min 750)</li> <li>• No. of termination cycles (Min 200)</li> <li>• Jack contacts - Phosphorous bronze, plated with 1.27micro-meter thick gold (Yes/No)</li> </ul>	
10	Cat 6 500/600 MHz UTP Cable (preference will be given to 600MHz)	<ul style="list-style-type: none"> <li>• 4 Pair Twisted Cable (Yes/No)</li> <li>• Support for Fast and Gigabit Ethernet, IEEE 802.3/5/12, Voice, ISDN, ATM 155 &amp; 622Mbps. (Yes/No)</li> <li>• Give Conductor Specifications</li> <li>• Give Insulation Specifications</li> <li>• Sheath : Fire Retardant (Yes/No)</li> <li>• Whether Tested upto 500</li> </ul>	

		<p>MHz (Yes/No)</p> <ul style="list-style-type: none"> <li>• Whether Tested upto 600 Mhz (Yes/No)</li> <li>• 4 twisted pairs separated by internal X shaped, 4 channel, polymer spine / full separator. Half will not be accepted. (Yes/No)</li> <li>• Standards : TIA / EIA 568 B.2-1 (Yes/No)</li> <li>• Specify Impedance</li> </ul>	
11	6 Core Single Mode Fiber Cable	<ul style="list-style-type: none"> <li>• Specify supporting wavelengths</li> <li>• Specify gradient index</li> <li>• If anti rodent?(Yes/No)</li> <li>• Fiber steel armoured ? (Yes/No)</li> <li>• should conform or exceed the EIA/TIA 455, EIA/TIA 568 , ISO 11801 &amp; ICEA-640 standards for Fiber and cable performance specifications. (Yes/No)</li> <li>• ECCS armour followed by a HDPE jacket, UL Compliant. Over the armour, water blocking powder applied for water tight cable. (Yes/No)</li> </ul>	
12	Fiber Patch Cord SC-SC	<ul style="list-style-type: none"> <li>• 9/125 micron SM fiber (Yes/No)</li> <li>• Duplex (Yes/No)</li> <li>• 3 meter in length (Yes/No)</li> </ul>	
13	UPS Power cabling from NOC to 8 switches and inside NOC (Phase, Neutral & Earth)	<p><u>Electrical wire spec</u></p> <ul style="list-style-type: none"> <li>• High quality online annealing (higher than the specified values as per IS 694) (Yes/No)</li> <li>• Fire Retardant (Yes/No)</li> <li>• 99.97% pure copper (Yes/No)</li> <li>• High ageing property</li> </ul>	

		<p>(Yes/No)</p> <ul style="list-style-type: none"> <li>• High Oxygen index (Yes/No)</li> <li>• ISO 9001 company (Yes/No)</li> <li>• Low Resistance (Yes/No)</li> <li>• 3 layer insulation (Yes/No)</li> <li>• ISI Marked (Yes/No)</li> <li>• 2.5 sq. mm. (Yes/No)</li> <li>• Number &amp; nominal dia.of wire No. /mm - 36/0.3 (Yes/No)</li> <li>• Resistance (Max.) per km. @ 20°C in Ohms - 7.41 (Yes/No)</li> <li>• Nominal thickness of insulation in mm - 0.8 (Yes/No)</li> </ul> <p><u>Power Outlets</u> Powder coated sheet metal boxes</p> <p>ISI marked 15A socket</p> <p>ISI marked 15A switch</p>	
14.1	<p>2 pair &amp; 50 pair voice cabling Color coded each wire twisted with its mate wire to form a pair and each such pair twisted with respect to all other pairs in concentric layer milinex taped with 30% overlap and then sheathed with ripcord</p>	<ul style="list-style-type: none"> <li>• 0.5 mm diameter solid annealed, high conductivity bare copper conductor (Yes/No)</li> <li>• Tinted (Yes/No)</li> <li>• Insulated with special grade high-density polyethylene with different colours. (Yes/No)</li> <li>• Attenuation Value</li> <li>• Crosstalk Value</li> <li>• Fire Retardant Jacket with high oxygen and temperature index (Yes/No)</li> <li>• Nylon rip cord (Yes/No)</li> <li>• Conductor Resistance (max.) ohms/km at 20°C - 92.20 (Yes/No)</li> <li>• Mutual Capacitance (max.)</li> </ul>	

		<p>nf/km - 50 (Yes/No)</p> <ul style="list-style-type: none"> <li>• Insulation Resistance in Air (min.) M-ohms/km - 10,000 (Yes/No)</li> <li>• Capacitance Unbalance Pair to Pair (max.) pF/km – 250 (Yes/No)</li> <li>• Conform to ITD specifications G/WIR-06/02, May 94 (Yes/No)</li> </ul>	
14.2	RJ 11 Faceplate with Back box	<ul style="list-style-type: none"> <li>• Product of reputed company with ISO 9000 certified &amp; CE certification by CSA (Yes/No)</li> <li>• CSA approved in accordance with IEC standards. (Yes/No)</li> <li>• ISI Marked (Yes/No)</li> </ul>	
14.3	200 pair & 50 pair main distribution frame box with backmount frame	Product of Internationally renowned brand (Specify brand and other details)	
14.4	Disconnection module 2/10	Product of Internationally renowned brand (Specify brand and other details)	

		<b>Brand</b>	<b>Unit</b>	<b>Unit Rate</b>
	<b><u>RACK</u></b>			
1	42 U		1 No	
2	12U		1 No	
	<b><u>UTP</u></b>			
1	Angular Face Plate with Cat-6 Keystone I/O – Double Socket		1 No	
2	Angular Face Plate with Cat-6 Keystone I/O – Single Socket		1 No	
3	Cat 6 UTP Cable 600 MHz		Per Mtr	
4	Cat 6 UTP Cable 500 MHz		Per Mtr	
5	CAT6 24 port Jack Panel		1 No	
6	CAT6 48 port Jack Panel		1 No	
7	CAT6 UTP Patch Cord 3 Mtrs		1 No	
8	CAT6 UTP Patch Cord 1 Mtrs		1 No	
9	PVC Casing Cap/ Conduit			
	a. 20 x 10 mm		Per Mtr	
	b. 25 x 10 mm		Per Mtr	
	c. 32 x 10 mm		Per Mtr	
	d. 20 x 12 mm		Per Mtr	
	e. 25 x 12 mm		Per Mtr	
	f. 25 x 16 mm		Per Mtr	
	g. 38 x 16 mm		Per Mtr	
	h. 38 x 25 mm		Per Mtr	
	i. 38 x 38 mm		Per Mtr	
	j. 50 x 16 mm		Per Mtr	
	k. 50 x 50 mm		Per Mtr	
10	32 mm HDPE Pipe		Per Mtr	
11	100 mm ladder type cable tray		Per Mtr	
	<b><u>FIBER</u></b>			
1	Fiber Cable 6core Single mode		1 No	
2	Fiber Patch Cord SC-SC Single mode		1 No	
3	Fiber Light Guide Interconnect Unit (LIU), 24 Port		1 No	
4	Fiber Panel Rack Mount Type 06 Port		1 No	
5	Fiber Panel Wall Mount Type 06 Port		1 No	
6	SC Single mode 9/125nm 1.5 m Pigtaills		1 No	
	<b><u>VOICE</u></b>			
1	Voice cable (2-Pair)		Per Mtr	

2	Voice Cable (50 Pair)		Per Mtr	
3	RJ 11 Faceplate with Back box		1 No	
4	Main distribution frame box with back mount frame (200 Pair)		1 No	
5	Main distribution frame box with back mount frame (50 Pair)		1 No	
6	Disconnection module 2/10		1 No	
<b>POWER</b>				
1	Powder coated sheet metal boxes	-	1 No	
2	ISI marked 15A socket	-	1 No	
3	ISI marked 15A switch		1 No	
4	Electrical cable 2.5 sq mm		Per Mtr	
5	Electrical cable 1.5 sq mm		Per Mtr	
6	Electrical cable 1 sq mm		Per Mtr	
<b>LABOUR</b>				
1	Laying of UTP Cable		Per Mtr	
2	Laying of Voice cables		Per Mtr	
3	Laying of Electrical wires		Per Mtr	
4	Laying of OFC Cable		Per Mtr	
5	Laying of Pipes /Capping Casing		Per Mtr	
6	Laying of HDPE along the wall/roofing, chipping the wall/ concrete & patching with cement where ever required		Per Mtr	
7	Fixing of 100 mm ladder Type cable tray		Per Mtr	
8	Termination of CAT-6 Information Outlet, Labeling, Testing, Documentation, scanning, and Certification		1 No	
9	OFC Splicing Charges, Labeling, Testing, Documentation, scanning, and Certification		1 No	
10	Fixing of Rack		1 No	
11	MDF Installation		1 No	
12	Earthing		1 No	
<b>Any other charges</b>				
1				
2				
3				
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<b>Others</b>		
1	I have read and understood all tender specifications and special terms & conditions. (Yes/No)	
2	Address of the System Integrator's registered office at Kerala	
3	Name of Contact Person(s) and contact nos, email IDs etc at Kerala	
4	Whether Manufacturer Authorization Form(s) attached (Yes/No)	
5	Whether OEM Certified Technical Data Sheet(s) attached (Yes/No)	
6	Whether System Integrator's ISO certificate copy attached (Yes/No)	
7	How long the System Integrator is in this business? Proof should be attached	
8	Whether Completion certificate of similar projects at Govt/Public sector attached (Yes/No)	