

Section VII. Technical Specifications

Item	Specification	Statement of Compliance
		<p><i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.] Please state the brand and model being offered</i></p>
1	<p>DESIGN AND IMPLEMENTATION OF FIBER OPTICS BACKBONE, STRUCTURED CABLING AND INSTALLATION OF ACTIVE NETWORK DEVICES FOR CATANDUANES STATE UNIVERSITY</p>	
	<p><i>Outdoor Optical Cable Specification</i></p>	
1	<p><i>The Fiber cable must be used is multi loose tube cable construction consists of 1 up to 72 cores.</i></p>	
2	<p><i>Consist of 250µm optical fibers in 12 fiber gel filled loose tubes with fillers.</i></p>	
3	<p><i>With fiber reinforced plastic (FRP) central strength member with water swellable threads and water swellable tape.</i></p>	
4	<p><i>Helically applied water blocking e-glass non-metallic strength members with ripcord and black high-density polyethylene (HDPE).</i></p>	
5	<p><i>Suitable for internal and external applications.</i></p>	
6	<p><i>Color Coded Fiber</i></p>	
7	<p><i>Cable cores, number of tube and fiber per tube: 12core-3 tubes, 4 core per tube</i></p>	
8	<p><i>Central Strength Member- FRP/PE</i></p>	

9	<i>Water Resistance Material- Water Blocking Yarn and Tape</i>
10	<i>Armoured- Plastic Coated Tape</i>
11	<i>Cable Diameter: 72Core- 10mm, 48Core-9.5mm, 12Core-7.8mm</i>
12	<i>Outer Jacket- Polyethylene (HDPE)</i>
13	<i>Meets ROHS requirement</i>
14	<i>Max Tension (N), Short term-4000 and Long term- 2000</i>
15	<i>Crush Loading (N), Short terms-1000 and Long terms- 500</i>
16	<i>Opticl Fiber Type- G.652D</i>
17	<i>Waveband-1310/1550 nm</i>
18	<i>Attenuation- 1310 ≤0.35 dB/km, 1550nm-≤0.22 dB/km</i>
19	<i>No. of Core is 6core, 12core, 48core, 72 core Singlemode</i>
20	<i>The service provider must have at least 10 years of operation in the business of providing information and technology (ICT) products and services, consulting or systems integration/ implementation.</i>
21	<i>The service provider must own and operate at least three (3) data centers in the Philippines.</i>
22	<i>The data center/s of the provider must be certified by TIA 942 or an equivalent certification by an international governing body. NexCenter certification is preferred but not required.</i>
23	<i>The service provider must also be able to operate at least three (3) data centers in the Philippines.</i>
24	<i>The service provider must be certified on: ISO 9001:2008 – Quality Management System ISO 27001:2013 – Information Security Management System ISO 20000-1:2011 – IT Services Management System</i>
25	<i>Fiber optics cable should have a label of "PROPERTY OF CATANDUANES STATE UNIVERSITY".</i>
	<i>Fiber Optic Patch Panel Specification</i>
1	<i>Standard 19" Rack Mountable</i>
2	<i>Integrated Splicing Unit</i>
3	<i>12, 16, 24, 28, 32, 48, 72, 92 or up to 144 ports SC</i>
4	<i>High quality sheet metal process and mist surface coating spraying</i>
5	<i>High quality fiber management and Structural accessories</i>
6	<i>Can be preloaded with different type of adapter plate</i>
	<i>Fiber Patch Cord Specification</i>
1	<i>Telcordia and RoHS compliant</i>
2	<i>Optic Performance (Singlemode), Insertion Loss- Max. 0.3dB, UPC better than 50dB. Typical: Typical 0.15 dB, APC better than 60 dB</i>

3	Bend insensitive fibers G657A/B	
	SC Pig-Tail Specification	
1	Optic Performance (Singlemode), Insertion Loss- Max. 0.3dB, UPC better than 50dB. Typical: Typical 0.15 dB, APC better than 60 dB	
2	Bend insensitive fibers G657A/B	
	CAT 6 UTP Cable Specification	
1	Application	
1.1	▪ Voice 4	
1.2	▪ Fast Ethernet(IEEE802.3)	
1.3	▪ 100Vg-AnyLAN(IEEE 802.12)	
1.4	▪ Token Ring(IEEE 802.5)	
1.5	▪ TP-PMD(ANSI X3T9.5)	
1.6	▪ 100Base-T Ethernet(IEEE 802.3u)	
1.7	▪ 155/622 Mbps 1.2/ 2.4 Gbps ATM	
1.8	▪ 1000Base-T Ethernet 4	
1.9	▪ 50 MHz Broadband video	
2	Industry Standard	
2.1	▪ UL, ETL Verified	
2.2	▪ TIA/EIA 568C.2	
2.3	▪ ISO/IEC 11801	
2.4	▪ EN 50173	
3	Cable Data	
3.1	▪ No. of Pairs: 4	
3.2	▪ Jacket Color: Gray	
3.3	▪ Insulation Thickness: 0.22mm	
3.4	▪ Nom.O.D.: 6.5mm	
3.5	▪ Flame Rating: CM	
3.6	▪ Transmission quality verified up to 250MHz	
4	Product Electrical Characteristics	
4.1	▪ Impedance: 100±15 ohms	
4.2	▪ Mutual Capacitance, max. nf/ 100m: 5.6	
4.3	▪ DC Resistance, max. Ohms/ 100m: 9.38	
4.4	▪ Capacitance Unbalance(Pair to Ground): 330pf/ 100m max.	
	CAT 6 Patch Panel Specification	
1	110 Enhanced Cat.6 Patch Panel	
1.1	▪ UL Listed	
1.2	▪ High performance, exceeds TIA/EIA 568B.2-1 Category 6 Hardware transmission performance	
1.3	▪ 110 and dual type IDC terminatio	
1.4	▪ 19" 24 port patch panel, 1U size & 48 port panel, 2U size	
1.5	▪ Accepts 22-26 AWG, stranded or solid wire	
1.6	▪ Wiring: T568A/ B	
2	Features	
2.1	▪ Meet TIA/EIA-568-B.2-1 Cat.6 15M Short Link requirements	
2.2	▪ 110 and krone dual type IDC termination	
2.3	▪ 19" 24 port patch panel, 1U size & 48 port panel, 2U size	
2.4	▪ Accept 22~24AWG, stranded or solid wire	

2.5	▪ Short contact design to improve transmission performance
2.6	▪ Modular jack meet FCC part 68
2.7	▪ Wiring: T568A/B
3	Industry Standard
3.1	▪ UL Listed
3.2	▪ TIA/EIA 568B.2-1
3.3	▪ ISO/IEC 11801
3.4	▪ EN 50173
4	Physical
4.1	▪ Housing: High-impact, flame-retardant plastic, UL94V-0 rated
4.2	▪ Contact material: Phosphor Bronze Alloy
4.3	▪ Plating: 50u" gold plated over 100u" nickel
4.4	▪ Plate: SPCC-SD 16G
5	Mechanical
5.1	▪ Insertion/Extraction life: 750 cycles min
5.2	▪ Number of IDC terminations: 200 cycles min
6	Electrical
6.1	▪ Insulation resistance: 500 Mega ohms min.
6.2	▪ Dielectric with standing voltage: 1,000 Volts, RMS, 60Hz, 1min.
6.3	▪ Contact resistance: 20 milli ohms max.
6.4	▪ Current rating: 1.5 AMPS at 20°C
7	CAT6 Information Outlet
7.1	▪ Meet ANSI/TIA-568-C.2 Cat.6 15M Short Link requirements
7.2	▪ Accept 22~24AWG, stranded or solid wire
7.3	▪ IDC connector with large space of each pair to improve crosstalk
7.4	▪ Modular jack meet FCC part 68
7.5	▪ Wiring: T568A/B
7.6	▪ ETL Verified Certificate Of Conformance
7.7	▪ UL Verified
7.8	▪ ISO/IEC 11801 2nd edition
7.9	▪ ANSI/TIA Standard 568-2.D
7.10	▪ CENELEC EN 50173
8	Features
8.1	▪ Vertical and Horizontal Jack versions available
8.2	▪ All-in-one Punch down of 8 wires
8.3	▪ Even wire trim process
8.4	▪ Maintains gas tight IDC connections
8.5	▪ Minimizes return loss & cross talk
8.6	▪ Multi use Keystones, can be used in Ezi-Tool and also standard punch down tool
9	Benefits
9.1	▪ Maintains gas tight IDC connections
9.2	▪ Insertion Loss reduction
9.3	▪ Removes risk of insulation and/or keystone jack damage
9.4	▪ Multi use ezi-JACKS, can be used in ezi-TOOL and also standard punch down tool

