



भारतीय प्रौद्योगिकी संस्थान कानपुर  
INDIAN INSTITUTE OF TECHNOLOGY KANPUR  
संगणक केन्द्र  
COMPUTER CENTRE

पत्रालय-आई.आई.टी.कानपुर-208016(भारत)  
P.O.-I.I.T. KANPUR - 208 016 (India)

CC/IITK/09/640  
June 21, 2018

Sealed quotations are invited for the following items for the Institute network:

| Sr. No. | Item Description  | Qty. |
|---------|---|------|
| 1       | UTP Cat 6 Cable, 305 meter Bundle                                     | 500  |
| 2       | UTP Cat 6A Cable, 305 meter Bundle                                    | 20   |
| 3       | UTP Cat 5E Cable, 305 meter Bundle                                    | 30   |
| 4       | I/O Cat 6 RJ45 Face Plate Simplex                                     | 2500 |
| 5       | I/O Cat 6 RJ 45 Face Plate Mounting Box                               | 2500 |
| 6       | I/O Cat 6 RJ 45 Jack  | 5500 |
| 7       | UTP Patch Cord Cat 6, 4Feet   | 3500 |
| 8       | UTP Patch Panel 24 Port unloaded multipurpose for Cat6 and Cat6A Jack | 125  |

**Terms & Conditions:**

1. All quotations must reach undersigned by July 12, 2018, 5 P.M.
2. Quotation must be valid till 30/12/2018.
3. Quotations shall be submitted in two parts.
  - Part-I (Technical) should contain all the technical details cum specifications of the product. Technical compliance of the above specification and makes should be clearly specified. It should contain un-priced bid along with terms & conditions, warranty, taxes etc. This envelope should be marked as "Technical Bid".
  - Part-II (Financial) The commercial bid of the above items should be in another sealed envelope marked as "Commercial Bid". It should contain commercial terms & conditions.
4. The vendor should have valid authorization for this tender from the OEM Company.
5. Please quote giving unit price for each of the items. The vendor must quote for all the items.
6. IIT Kanpur is exempted from excise duty.
7. IIT Kanpur is exempted for partial custom duty (CD applicable to IIT Kanpur is 5.15%).
8. Please clearly mention the tax rate (like GST etc.), if charged extra.

*Amey Karkare*  
(Dr. Amey Karkare)  
Head

**Eligible Criteria for OEM & Bidder**  
**(Enquiry No. CC/IITK/09/640 dated 21.06.2018)**

**Criteria of Passive OEM**

| S.No. | Description   |
|-------|---|
| 1     | <b>The OEM of Passive Network Components should be present in the India last 10 Year.</b><br>(Document proof Required)            |
| 2     | 25-year Performance warranty; Warranty to cover Bandwidth of the specified and installed cabling system                           |
| 3     | Should have Technical / Telephonic support center in India  |
| 4     | OEM must have ISO 9001:2008, ISO 9001:14001.  |
| 5     | Factory Test report have to be provided for the product during supply.  |
| 6     | All the components/raw material used must be RoHS verified  |
| 7     | OEM should have manufacturing Unit and product design & Development center in India and customer will be able to visit at center. |
| 8     | All passive components should be RoHS complied  |
| 9     | OEM should have at least one RCDD certified.  |
| 10    | The entire passive components should be from single OEM of one make.  |

**Eligible Criteria for Bidder**

| S.No. | Description   |
|-------|---|
| 1     | The bidder must be a reputed manufacturer (OEM) or his authorized System Integrator of the type of products offered. In case of system integrator, a letter of Authorization from OEM, specific to the tender should be enclosed. <b>The bids received without authority are liable to be rejected.</b> |
| 2     | The bidder shall provide the Registration number GST/Sales Tax/Service Tax/PAN/TIN-Registration Number.   |
| 3     | The bidder should be ISO certified 9001:2015.   |

**Note: Bidder should index all the documents according to item list**

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## Technical Specification for Enquiry No. CC/IITK/09/640 dated 21.06.2018

### A. Cat 6 UTP Cable

| S.No     | Minimum Specifications   |
|----------|--|
| <b>A</b> | <b>UTP PVC Cable, TIA-568C.2, Category-6 , (305 Mtrs./1000 feet per Box)</b>   |
| A1       | Shall be of 4 twisted pairs of 23 AWG solid conductors ,   |
| A2       | Shall be 4-pair Unshielded twisted pair meeting Category 6 tested to 600 MHz or more (4 connector test report from Intertek to be submitted with Bid).   |
| A3       | Should comply with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-TX), 10 and 100 BASE-TX, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video, and analog and digital voice (VoIP). |
| A4       | The Cable shall have a nominal outer diameter of 6mm +/-10%. Nom Polyethylene insulation.  |

### B. Cat 5e UTP Cable

| S.No.    | Minimum Specifications  |
|----------|---|
| <b>B</b> | <b>Cat 5e UTP Cable (305 Mtrs./1000 feet per Box)</b>   |
| B1       | Unshielded Twisted Pair, Category 5e, TIA / EIA 568 B.2 , 24 AWG solid bare copper , Polyethylene |
| B2       | The cable shall have an outer diameter of 4.7 mm to 4.9 mm .                                      |
| B3       | Minimum 100 MHz, 45ns MAX , 1 to 100 MHz.   |
| B4       | Attenuation, Pair-to-pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR           |

### C. Cat 6 UTP Patch Cord 4 Feet

| S.No.    | Minimum Specifications  |
|----------|---|
| <b>C</b> | <b>Cat 6 UTP Patch Cable, TIA-568C Category-6</b>   |
| C1       | Length shall be available in 4feet.   |
| C2       | All patch cords shall conform to Category 6 & conductor shall be stranded for better flexibility Shall be ETL Channel Verified and UL Listed. |
| C3       | Shall support network line speeds up to 1 Gbps  |
| C4       | Colors- Blue, Grey, Yellow, Red & Orange  |

### D. Information Outlet (I/O) RJ45

| S.No     | Minimum Specifications   |
|----------|--|
| <b>D</b> | <b>PCB based Information Outlet (I/O) RJ45, TIA-568C Category-6, Termination of Category-6 UTP Cable</b>   |
| D1       | Shall support network line speeds up to 1 Gbps   |
| D2       | The information outlet will have insertion life of 750 cycles minimum  |
| D3       | Material:<br>Jack Housing - Polycarbonate, 94V-0 rated<br>Jack Contacts Phosphor bronze with 50 micron-inches of gold over 100 micron-inches Nickel plating.<br>IDC Terminals - Phosphorous bronze with nickel plating |
| D4       | Colors (Any 4)- Blue, White, Yellow & Red (As required by IITK)  |

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**E. UTP Patch Panel 24 Port for RJ-45 Jack**

| S.No     | Minimum Specifications   |
|----------|--|
| <b>E</b> | <b>UTP Patch Panel 24 Port unloaded multipurpose for Cat6 and Cat6A Jack</b>   |
| E1       | UTP Patch Panel, Unloaded with Individual Replaceable Jack 24 nos. UTP ports for PCB based IO Jacks.                           |
| E2       | Shall be unloaded or loaded with individually replaceable 24 nos. Category-6 I/O Jacks complying with TIA-568.C.2              |
| E3       | Shall be 19" rack mountable and of 1U height & complete with all mounting accessories. Shall be UL Listed and RoHS Compliance. |
| E4       | Shall have labels for identification of ports.   |
| E5       | Shall have Comprehensive port numbering on front.  |

**F. Faceplate Single Port/Gang Box**

| S.No     | Minimum Specifications  |
|----------|---|
| <b>F</b> | <b>Faceplate Single Port</b>  |
| F1       | Shall be Single Port (RJ45) square plate, dimension as per commercially available modular office furniture.   |
| F2       | Shall have spring shuttered front access for preventing ingress of dust   |
| F3       | Face Plate Shall be supplied with Gang Box of the same OEM if manufactured by OEM or of equivalent Brand (Schneider, Legrand, Anchor & Havells) if not manufactured by OEM. |
| F4       | Shall have Write on labels in transparent plastic window along with the plate   |
| F5       | Shall have Screw hole covers along with the plate   |
| F6       | Shall be able to support variety of jacks (Cat6 & Cat6A)– UTP and STP Information outlets   |

**G. Cat 6A (U/UTP) or (F/UTP) Indoor Cable**

| S.No. | Minimum Specifications  |
|-------|---|
| G     | UTP Cable, TIA-568C.2, Category-6A (U/UTP) or (F/UTP), (305 Mtrs./1000 feet per box)  |
| G1    | All cables shall be 4-pair 100 ohms balanced paired cables. They are unshielded twisted pair cables (U/UTP or F/UTP) meeting or exceeding the quality and performance requirements for Category 6A cables stipulated in EIA/TIA-568-C standard, and ISO/IEC 11801 |
| G2    | ANSI/TIA-568-C.2 Category 6A (U/UTP) or (F/UTP).  |
| G3    | Each Category 6A U/UTP or F/UTP cable shall be terminated on an 8-conductor Category 6A jack in accordance with the EIA/TIA-568C wiring code.   |
| G4    | The cable shall have Centre filler to maintain pair twisting, and optimum NEXT (Near End Crosstalk) and ELFEXT (Equal Level Far End Crosstalk) performance.   |
| G5    | The cable shall be accompanied with traceable serial numbers from the manufacturer indicated on the packaging to assist in quality validation of the installed cables   |
| G6    | Conductor: Solid Bare Copper  |
| G7    | AWG: 23   |
| G8    | Conductor Dia. Nom. (+/-0.02mm): 0.59   |
| G9    | Filler: PE  |
| G10   | 1.0-500.0MHz Delay Skew (ns/100m): <= 45  |

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