

General Terms and Conditions:

1. Sealed tenders are hereby invited for the work of “Supply and Installation of Data Points, LAN cabling, other required computer networking materials along with electrical wiring and other repair works at Computer Laboratory of IMA, Bhubaneswar.”, from Contractors, those who have worked in any Govt./Semi Govt. organizations and have successfully carried out minimum one/two/three similar work (BUILDING or Lab. Wiring/ LAN Points work) during the last five years. The eligible contractors may submit their bid along with supporting documents of fulfilling the above conditions otherwise their bids bear the risk of not being considered. The eligible contractors are also required to submit the self-attested copies of PAN card, registration and GST certificate. In support of fulfilling all the essential conditions mentioned, the contractor shall submit the details of the past work, mentioning the name of work, estimated cost, tendered amount, gross value of work done, date of commencement as per agreement & actual date of completion as per agreement along with schedule of quantities executed and any penalty levied due to delay in executing the work.
2. Period for completion of the work will be 30 (Thirty) days and the date of commencement shall be reckoned from the tenth day of issue of award letter.
3. Tender documents are to be submitted in a sealed cover. The documents in support of eligibility criteria along with the bid should be covered in a single envelope super scribing the name of work, address of contractor and date of opening. **Tenders complete in all respects, will be accepted up to 3.30 PM on 17-11-2017. The bid shall be opened at 4.00 PM on 17-11-2017.**
4. Tenders applications should reach by regd. /speed post to “**The Director, Institute of Mathematics and Applications, Andharua, Bhubaneswar, Odisha, PIN: 751029**”. To ensure that the same reaches before the date and time indicated above. Late or delayed tenders are liable for rejection.
5. Director of IMA, Bhubaneswar does not bind himself to accept the lowest or any tender and reserves the right to accept the tender either in whole or in part. The decision of the Director shall be final in this regard.
6. Canvassing in any manner or form will lead to rejection of the Bid.
7. The Bid shall remain valid for a minimum period of 90 days from the date of opening of the tender for the purpose of acceptance and award of work. Validity beyond 90 days from the date of opening shall be by mutual consent.
8. **Before tendering, the tenderer shall inspect the site to fully acquaint himself about the condition in regard to accessibility to site, nature and extent of ground, working condition of site and locality including stacking of materials, conditions affecting accommodations and movement of labour, etc., which are required for satisfactory execution of the work. No ignorance of the same, whatsoever shall be entertained under any circumstances.**
9. Stores to be issued: - No material shall be issued by the Institute.
10. The successful bidder will be required to submit the names, qualifications and experiences of the supervising staff to be deployed for execution of the work. In case of any changes occurring during the course of execution of the said work, the same shall also be intimated by the bidder to the institute.
11. The Contractor shall have to make his own arrangements for storage of materials required for execution of the work at IMA, Bhubaneswar.
12. All the mandatory testing charges will be borne by the contractor

Sd-
DIRECTOR
IMA, Bhubaneswar.

List of completed works by the Contractor:

Detail list of works, completed satisfactorily during last five years (minimum 3).

Name of works	Location of site	Value of Work	Name of organization/ engineer in charge under whom the work is completed

N.B:- The copy of work order and completion certificates from the organization may be attach

DETAIL CREDENTIALS OF THE CONTRACTOR

Contractors shall fill this form and enclose it with the original copy of tender (Technical Bid)

Name of the Contractor _____

Firm of the Contractor _____

Telephone No. (Official) _____

Office Address:

SIGNATURE OF THE TENDERER

Technical Specifications

1. **The OEM should be ISO 9001:2000 & QS: 9000 Certified.** If the company has environmental management systems in place like ISO 14001 accreditation the same shall be added advantage
2. **CAT 6 UTP components should have independent lab verification like ETL Certified ANSI/TIA-568-C.2, ISO/IEC 11801 and EN50173-1 Category 6.** The cabling should be certified to have application support warranty for next 25 years. OEM should be a partner with standard committee like EIA/TIA and TR standards.
3. OEM and their Brand quoted should have minimum 10 Years of Installation presence in India. Proof of Documents to be attached.
4. **OEM** authorization should be provided by the contractor.

CAT 6 Cable Specifications

SI No.	Details	Specification	Yes/No Deviation if any
1	Type	23 AWG solid bard copper, Unshielded Twisted 4 Pair, Category 6, TIA / EIA 568 C.2, ISO/IEC 11801 & UL 444 standard.	
2	Conductors	Solid bare copper	
3	Insulation	Polyethylene	
4	Jacket	LSZH jacket complying to: Fire rating IEC 60332-1 Toxicity IEC 60754-1 Smoke density IEC 61034-1 NEMA WC-63.1 Category 6	
	Pair Separator	Cross-member (+) fluted Spline.	
5	Approvals	ETL 4 connector channel verified to ANSI/TIA Cat 6, ISO 11801 for Class E	
6	Frequency tested up to	Minimum 250 MHz; ETL report for 4 connector channel performance upto 250 MHz to be provided.	
7	Packing	Box of 305 meters	
8	Cable Outer Diameter	6.1mm	
9	Delay Skew	45 ns @ 100Mhz	
10	Bend Radius	4 * Cable Diameter	
11	Impedance	100 Ohms +/- 15 ohms,	
12	Mutual Capacitance	5.6 NF MAX /100 Mtr.	
13	Conductor Resistance	6.9 Ohms Max /100 mtr	
14	Velocity of Propagation Delay	70%	

15	Performance characteristics @ 250 MHz	Attenuation: 32.8dB/100m NEXT : 38.3 dB PS NEXT : 36.3 dB ELFEXT : 19.8 dB PSELFEXT : 16.8 dB Return Loss: 17.3 dB ACR : 5.5 dB PSACR :3.5 dB	
16	ROHS Compliant	ROHS/ELV Compliant	

CAT6 I/O Specification

SI No.	Details	Specification	Yes/No Deviation if any
1	Type	Should be Simplex/Duplex/Quad.	
2	Material	Fire -retardant Plastic, ABS, White color.	
3	Acceptability	Should be able to accept Cat6A, Cat6 and Cat5e information outlets	
4	Approvals	UL94V0	

CAT6 Patch Cord Specification

SI No.	Details	Specification	Yes/No Deviation if any
1	Type	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801, IEC 60603-7, FCC Part 68 Subpart F Specifications.	
2	Conductor	Cat6 Patch Cord should be 4 Twisted Pair, 24 AWG Stranded Bare Copper Conductors. Contact Blade should be Phosphor bronze plated with 50u'' gold over 100u'' nickel undercoat.	
3	Length	4 feet, 7 feet, 10 feet	
4	Plug Protection	Factory fitted Strain relief boots on either side	
5	Performance Characteristics	Max. Current Rating should be 1.5 Amp Min. Insulation Resistance should be 100MOhm Max. Contact Resistance should be 20mOhm Dielectric Strength should be 1000 VAC (RMS) Voltage Rating should be 30 VAC Maximum.	
5	Jacket	LSZH	
6	Operating Environment Range:	The patch cord should have Insertion Life of 750 mating cycles with Pull force of min. 89 Newton, Humidity 10% to 90% R.H., Temperature range of -10 Deg C to +60 Deg C	

OEM Eligibility

Sl. No.	General terms and conditions for Cat6 Structured cabling Systems:	Yes/No Deviation if any
01	Passive OEM offered must be in India / SAARC for more than at-least 10 years.	
02	OEM should have members participating in Telecommunications Industry Association committee with presence in all of the Telecommunication subcommittees of the following: <ul style="list-style-type: none">• TIA TR-42.1 Subcommittee on Commercial Building Telecommunications Cabling• TIA TR-42.5 Infrastructure Terms Subcommittee• TIA TR-42.10 Sustainable Information Communications Technology Subcommittee	
03	OEM should be a member of Telecommunications Industry Association (EIA / TIA) Information.	
04	All cables & components offered should be ROHS mentioned in Data Sheet.	
05	OEM should provide a below mentioned third party test report for Cat6 LSZH Cable: Transmission Test : TIA/EIA 568 C.2 Channel test : TIA/EIA 568 C.2 Smoke Density Test : IEC61034-1 Halogen Acid Gas Content : IEC60754-1 Flame Retardancy Test: IEC60332-1	
06	OEM Should be ISO certified organization	
07	All passive products from single OEM & should have 25 years of channel performance and Component warranty.	

MEASUREMENT AND FINAL BILL

1. The contractor shall submit his final bills with detail measurement for the purpose of payment & bills shall be processed by the various offices for payment, as per existing procedure.
2. The contractor shall extend all possible co-operations for checking the measurement. Decision of the officer in charge of IMA, Bhubaneswar shall prevail. In case of any dispute, the final decision lies with the Director of IMA, Bhubaneswar which shall be binding on both the parties.

OTHERS

If, the contractor has to remove/dismantle any old, damaged wiring & fixtures etc. for the purpose of execution of the said work, the same shall be deposited with IMA Stock and Store Section along with the list of materials under intimate to the concerned officer in-Charge. No extra payment will be made by the institute for this purpose.

SIGNATURE OF THE TENDERER

Financial Bid

Work: Supply and Installation of Data Points, LAN cabling, other required computer networking materials along with electrical wiring and some repair and maintenance work at Computer Laboratory of IMA, Bhubaneswar.

Sl.No	Work Description	Cost (including all taxes)
01	Material supply and installation of wired data points (Approximately 35)	
02	Material supply and installation of electrical wiring for 32 computers, provision for electric supply points for audio visual equipments, projector and other imaging devices.	
03	Supply and installation of a wireless data point (01)	
04	To make the Laboratory water proof (total 08 number of glass doors)	
05	Repair & Maintenance of ceiling.	
Total Cost		

Signature of Tenderer