

Under Certificate of Posting

Department of Physics, Indian Institute of Technology
IIT.P.O. Madras-600 036

Ref. No.

Date. 24.06.2015

PHY	2015	STORES	003
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To

Dear Sir,

DUE DATE: 15.07.15

1. Quotations are invited in duplicate for the item shown below/overleaf/ enclosed list.
2. The quotations duly sealed and superscribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS &D RATE CONTRACT, RC No.and the price must be mentioned. It may be also please be indicated whether the supply can be made direct to us at the Rate Contract price. If so, please send copy of the RC (Please note that we are not Direct Demanding Officers)
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for, should be submitted free of charges, and collected back at the supplier's expenses.
6. **Local Firms** : Quotations should be for free delivery to this Institute. If Quotations are for Ex-godown . delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train/lorry transport must be indicated. If Ex-godown, packing, forwarding and freight charges must be indicated.
8. The rate of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim, for Sales/General taxes will be admitted at any stage and on any ground whatsoever . **The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to non-Government Educational Institutions run with no profit motive for which a concession. Sales tax Certificate will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Specification enclosed- Please indicate compatibility with specifications

Yours Sincerely

Dr. Manu Jaiswal
HEAD/CO-ORDINATOR

Minimum Specifications for Addressable Fire Alarm System to be Installed for Physics Department, HSB Block, IIT Madras:

- 1.) **MAIN PANEL:** Supply, installation, testing & commissioning of microprocessor based minimum single (or more) loop analogue addressable networkable type fire alarm control panel with (minimum) 150 character LCD display, event logging option, programmable relay controls, 200-250 V AC power supply, maintenance free battery and automatic battery charger for 24 hours normal operation and 30 minutes (or more) back-up time during power failure or emergency. The loop(s) should be able to accommodate 250 (or more) devices and the panel should be expandable to 4 (or more) additional loops if required in future (these additional loops are not required at present). The Main Panel must be UL listed. Software for central monitoring system, for TCP/IP module and provision for GSM dialler should be there. There should be advanced power-surge protection, fuse protection etc. available for the panel, which should be elaborated in detail in the quoted specifications. Password protection option for Main panel. User-friendly key board / key pad, event and alarm display. Audio and visual notifications should work even in the event of CPU failure. Main Panel should allow future integration of voice evacuation system.

THE MAIN PANEL SHOULD BE QUOTED SEPARATELY FROM REST OF THE PARTS.

- 2.) **GSM DIALLER:** GSM Dialler unit capable of calls & sms to be integrated with the Main Panel.
- 3.) **LOOP(S):** The loops should use class-A wiring concept.
- 4.) **DETECTORS:** Supply, installation, testing & commissioning of 110 nos. of addressable Multi-sensors (optical + thermal type) with standard base. UL listed. Flashing LEDs. Advanced communication and detection protocols. Should also have rate of rise of temperature sensing. Required junction boxes and accessories must be included.
- 5.) **RESPONSE INDICATOR FOR DETECTORS ABOVE CEILING:** Response Indicators 10 nos. would for those detectors fixed above false Ceiling.
- 6.) **SOUNDER WITH STROBE:** Supply, installation, testing & commissioning of 15 nos. of addressable sounders with strobe, wall-mounting type, with required power supply and accessories. Sound rating of at least 90 db at a distance of 1 m.
- 7.) **MANUAL CALL POINTS:** Supply, installation, testing & commissioning of 15 nos. of Manual Pull station that can be addressed and monitored from the Main Panel. UL listed.

- 8.) **ETHERNET MODULE:** Supply, installation, testing & commissioning of Ethernet module to provide communication between local network and main panel. Should allow display on 5 PCs (or more) and control option for at least 1 PC. It will be the vendor's responsibility to provide module compatible with LAN available at IIT Madras.
- 9.) **SOFTWARE FOR CENTRAL MONITORING SYSTEM:** Supply, installation, testing & commissioning of Software that should allow monitoring & control of events on PC, compatible with TCP/IP module and compatible with GSM dialler. The panel(s) will have static IP address on LAN.
- 10.) **ISOLATORS:** Supply, installation, testing & commissioning of suitable nos. of addressable fault isolators for every 16 devices (or less). The isolator should protect against short-circuit and over voltage. Required accessories and junction boxes must be included.
- 11.) **RELAY MODULE:** Supply, installation, testing & commissioning of Relay module – 1 nos. UL Listed. With power supply and accessories.
- 12.) **CABLE WITH CONDUIT:** Supply, installation, testing & commissioning of the following. Please quote these 3 as clear separate options to choose one from. The cost of cable, conduit & all accessories, consumables should be **per meter** including installation charges. 1000 meters length will be used for price comparison but payment will be done separately at actual. The actual length after installation may be longer or smaller. **The cost of cable, conduit, accessories must be mentioned separately and not added to the total of the other items.**
- Option-1:** ISI marked 2-core Twisted-pair, multistranded un-armoured FRLS cable 1.5 sq mm with rigid PVC conduit with necessary base clamps, screws, etc., with saddle-spacers every 0.4 meters, complete with junction Box, lugs, cable compression glands, cable tags, ferruling and any other accessory needed for installation. Compatible with IS 2189 specifications.
- Option-2:** ISI marked 2-core Twisted-pair, multistranded un-armoured FRLS cable 1.5 sq mm with MS conduit pipe with necessary base clamps, screws, etc., with saddle-spacers every 0.4 meters, complete with junction Box, lugs, cable compression glands, cable tags, ferruling and any other accessory needed for installation. Compatible with IS 2189 specifications.
- Option-3:** ISI marked 2-core Twisted-pair, multistranded un-armoured FRLS cable 1.5 sq mm with suitable GI conduit with necessary base clamps, screws, etc., with saddle-spacers every 0.4 meters, complete with junction Box, lugs, cable compression glands, cable tags, ferruling and any other accessory needed for installation. Compatible with IS 2189 specifications.
- Option-4:** ISI marked 2-core Twisted-pair, multistranded Armoured FRLS cable 1.5 sq mm without conduit but complete with all accessories needed for installation as per IS 2189 specifications.

Length at actual to be paid separately, but the cost per meter needs to be quoted both for the cable, conduit as well as installation charges.

All minor civil work related to installation of cable & conduit is in scope of the vendor.

- 13.) **ON-SITE TRAINING & USER MANUAL:** The company will conduct on-site training session for the staff / security personal involved after the installation with the work apart from providing a clearly worded user manual. The training must include cover software / PC monitoring , main panel use, as well as various maintenance and testing protocols for the devices.
- 14.) **CLEAR WARRANTY STATEMENT:** Minimum one year or more warranty statement.
- 15.) **EXTENDED WARRANTY STATEMENT AND AMC STATEMENT:** An **option** to choose from an additional 1 year warranty with additional 3 years AMC (total 1+1+3 = 5 years plan). The costs for additional warranty and additional AMC will **not** be used for price comparison in tender.
- 16.) **MAINTENANCE FREE BATTERIES:** The price of maintenance free batteries must be quoted as an **optional** item AND additionally the exact minimum specifications of the batteries must be provided so that the purchaser can choose from either option of buying the batteries or purchasing from other sources. The costs for maintenance free batteries will **not** be used for price comparison in tender.
- 17.) **PC:** The price of one PC for integrating with main panel through LAN must be quoted as an **optional** item **AND** additionally the exact minimum specifications of the system (e.g. memory, processor speed, OS etc.) must also be provided – so the purchaser can choose from either option of buying the PC or purchasing the same from other sources. The costs for PC will **not** be used for price comparison in tender.
- 18.) **ANY ACCESSORIES, PARTS, CABLES NEEDED FOR SATISFACTORY OPERATION OF THE ABOVE SYSTEM.**
- 19.) **LOCAL SUPPORT TEAM:** A statement on availability of local support team and assurance of support to immediately solve problems and faults arising in the components must be provided. It is necessary for the company to have local support team in Chennai to rectify problems in shortest possible time.
- 20.) **FUTURE AVAILABILITY OF SPARE PARTS:** The company must assure availability of all spares for at least 7 years.
- 21.) **EXPERIENCE:** Evidence should be provided for at least 3 successful installations anywhere in India in the past 5 years, with the number of sensor devices installed at each location equal or exceeding the number requested in this tender.

- **PLEASE PROVIDE SEPARATE FINANCIAL AND TECHNICAL BIDS IN SEALED ENVELOPES.**
- **PLEASE FILL THE DETAILED COMPLIANCE SHEET WITH REGARD TO EACH POINT WITHOUT WHICH THE TENDER BID WILL NOT BE CONSIDERED.**