

**Office of the Dean Research and Development
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103**

Institute Project Code: DRC/MLA-DEITY/ETC/PB/009/16-17

**Department of Electronics and Telecommunication Engineering
Indian Institute of Engineering Science and Technology, Shibpur
Howrah-711103**

Under

VISVESVARAYA YOUNG FACULTY RESEARCH FELLOWSHIP SCHEME

Ref.: Tender Advt. No. EC 1340, dated 02.02.2018

Notice Inviting Quotations

Sealed quotations are invited for, Mass flow controller as per the following technical specifications. The relevant bidding document can be downloaded from the website. The document can be also obtained from the Department of Electronics and Telecommunication Engineering (contact: Prof. Monojit Mitra, HOD, ETC and Dr. Partha Bhattacharya, Assistant Prof, ETC) between 10.30 a.m. and 4.00 p.m. on all working days **from the date of advertisement**. Last date of submission of sealed quotation is **within 09/02/2018**.

Dean (R &D)

(A. Code DRC-T121/17-18)

This is downloadable

**INDIAN INSTITUTE OF ENGINEERING SCIENCE AND
TECHNOLOGY, SHIBPUR**



BIDDING DOCUMENT

For

Mass flow controller

Under

Institute Project Code: DRC/MLA-DEITY/ETC/PB/009/16-17

Under

VISVESVARAYA YOUNG FACULTY RESEARCH FELLOWSHIP SCHEME

February 02, 2018

**SECTION I: TERMS & CONDITIONS AND IMPORTANT INSTRUCTIONS
FOR BIDDERS**

1. Bidders are to invited to submit sealed quotation as per the technical specifications for tendered item to Prof. Monojit Mitra, HOD and/or Dr. Partha Bhattacharyya, Assistant Professor, Department of Electronics and Telecommunication Engineering, **on or before 09/02/2018 date** between **10.30 a.m. to 4.00 p.m.** except Saturday, Sunday and other public holidays.
2. The last date of receipt of tenders is before the **09/02/2018**. Quotations received later will not be entertained under any circumstances.
3. Bidders are to submit this tender document in original after accepting the terms and conditions.
4. Date and time of opening of bid is **12th February, 2018 at 11.00 a.m.** and the place of opening of bid is office Room of the Department of ETC, Indian Institute of Engineering Science and Technology, Shibpur, Howrah-711103.
5. The Price Bid should clearly mention the price including the following:
 - Ex Works Price
 - Packing and Forwarding Charges, if any
 - Freight and insurance, up to Indian Institute of Engineering Science & Technology (IEST), Shibpur, Howrah, including loading and unloading charges
 - All taxes, GST, duties, levies applicable, **in INR**
 - Erection, Commissioning and testing charges at IEST, Shibpur site**The entire price (inclusive everything) for delivery upto IEST should be in INR only (Quotations in other currency other than INR will not be acceptable)**
6. Bidders are to submit the quotations in Sealed Cover to the Department of Electronics & Telecommunication Engineering in the following address:

**Dr. Partha Bhattacharyya,
Department of Electronics and Telecommunication
Engineering,
Indian Institute of Engineering Science and Technology,
Shibpur, Howrah-711103, India**
7. All bids should be submitted in ONE-BID (TECHNO-COMMERCIAL BID) Format in covers (Enquiry Number must be mentioned on cover).

TECHNO-COMMERCIAL BID - giving Detailed Specifications, International Standards (BIS/INTERNATIONAL), Catalogues, List of users & Technical Details / Operating Parameters, Pre-Installation Requirements, payment terms, warranty, etc. along with PRICE BID - giving full Prices in Indian Rupees (only) for

- (a) Tendered item.
 - (b) Essential Accessories & Spares.
8. The price quoted should be inclusive of all Taxes, GST, duties and levies. Inclusion of Tax/Levy at a latter stage will not be accepted. Freight, Insurance charges should be clearly indicated.
9. The materials are to be supplied at a place within IESTS premises between 11.00 a.m. and 4.00 p.m. The tenderer will be responsible for any breakage, damage or defect in the equipment detected subsequently. The supply and installation of the equipment should be completed within a period not exceeding 3 months from the placement of the formal work order or opening of the LC failing which appropriate action will be taken as per university rules.
10. If the supply/ Completion of work is not completed within the stipulated period as indicated in the Work Order, a Liquidated Damage @ ½ per cent per week will be imposed subject to maximum of 5% of the value of work order.
11. For Indian purchase (*This clause is applicable only for Indian purchase and not applicable for foreign purchase*):
- Bills in triplicate should be presented for payment within 15 days of Supply / Completion of work. No Advance Payment can be made. All bills are to be accompanied by Order copies and Challan Receipt. The Order Number is to be noted on both the Challan and the Bill.
12. All payments are subjected to statutory deductions as and when applicable
13. **Earnest Money Deposit:**
NIL
14. Tender is to be kept valid for acceptance for 3 months with effect from the last date of issue of the tender without any modifications in its terms and conditions.
15. **Documents to be submitted with the tender:**
- Tender Documents/Terms & Conditions in Original duly signed by the Proprietor / Partner/ Director of the Company as a token of acceptance of Terms & Conditions of Tender.
16. The equipment and accessories will carry a guarantee/warranty for a period of 12 months from the date of commissioning. Guarantee/warranty for all the items supplied will be on 'all comprehensive' basis, i.e., including repairs, replacements, maintenance etc. Calibration / Test Certificate must accompany along with the equipment. Supply of equipment shall include installation, erection, commissioning and demonstration. Indian Institute of Engineering Science and Technology

(IEST), Shibpur, Howrah reserves the right to accept/ reject all or any of the bidders without assigning any reason whatsoever.

17. Customs Duty & Excise Duty

- The University will not issue any C or D form availing of concessional Sales Tax/ VAT.
- The University will issue Customs Duty Exemption Certificate or Excise Duty Exemption Certificate for foreign purchase, if required.
- **PAN No. and GST No. Should be mentioned in the bid documents, without which quotation will not be considered. Photocopy of the PAN card, GST and trade license need to be submitted.**

18. Indian Institute of Engineering Science and Technology, Shibpur reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.

We accept the above terms and conditions.

Dated:

Signature of Bidders/Suppliers
With date & Seal

SECTION II: TECHNICAL SPECIFICATIONS

Mass flow controller with flow range of 0-500 sccm,

Accuracy: $\leq \pm$ (1% of reading + 0.4% of Full Scale),

Operating Range: 1% to 100% of full scale measure and control,

Controllable flow rate \geq 100% of full Scale,

Inbuilt display and control panel (separate display and controller is not acceptable),

Input /output Signal: digital mass flow, volumetric flow, pressure & temperature RS-232 serial (interfacing option with pc is desirable), ‘

Response Time : \leq 100 ms

Calibrated for: air, process connection: 1/4 inch,

Target gases: air, H₂, O₂, N₂, C₂H₂, Ar, CO₂, CO, D₂, C₂H₆, C₂H₄, He, Kr, CH₄, Ne, N₂O, C₃H₈, SF₆, Xe, i-Butane, and n-Butane.

Power Supply: 100-240VAC to 24VDC