

Date: 07/10/2013

Notice Inviting Quotation

Sealed quotations are invited for purchase of Mass Flow Controllers- 2 Nos. & One Back Pressure regulator with local display and communication option.

TECHNICAL SPECIFICATION:

Mass Flow Controller

1. Pre-calibrated for multiple gases including: Air, Ar, O₂, N₂, H₂, CO₂, CO, CH₄, Ethane, Acetylene, Ethylene, Butane, Propane and N₂O.
2. Local display (Preferably Integrated Display), displaying MFC measured and/or controlled parameters such as: Mass Flow Rate, Volumetric Flow Rate, Pressure, Temperature and Set Point.
3. Response speed of **100** msec or less.
4. Capability to operate the MFC in the following modes: Serial {USB interface or RS-232 or RS-485}, Analogue {0-5VDC or 0-10VDC} and Standalone {i.e. local mode}.
5. Accuracy: +-1% of full scale)
6. Repeatability: +-0.5% full scale
7. Operating range: 0.5% to 100% full scale
8. Turndown ratio: 200:1
9. Maximum working pressure : 10 bar

Back Pressure regulator or Pressure controller in the upstream

1. Working pressure 0-500 psi
2. Accuracy: Full Scale Pressure >2" H₂O : +-0.25% of full scale
3. Repeatability: 0.01% full scale
4. Turndown ratio (min): 100:1 more is acceptable
5. Response time: 100 msec or less than 100 msec
6. Control Loop: PID control loop, (User selectable P & D parameter)
7. Local display preferably local display

8. Capability to operate the PC in the following modes: Serial {USB interface or RS-232 or RS-485}, Analogue {0-5VDC or 0-10VDC} and Standalone {i.e. local mode}.

TERMS AND CONDITIONS

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as “Technical Bid” and “Financial Bid”. Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as **“Quotations for Purchase of Mass Flow Controllers & Pressure Regulators on 7th October, 2013”**. The quote should reach the following address on or **before 22nd October 2013, by 5 PM.**

Dr. Sreedevi Upadhyayula

Department of Chemical Engineering

Indian Institute of Technology Delhi (IIT Delhi)

Hauz Khas, New Delhi-110016

2. Please quote prices at **FOB New Delhi**, inclusive of installation charges. CIP charges should be quoted separately.
3. The quotations should be in the currency of the country of origin as well as Indian Rupees wherever possible and should be valid for at least 3 months.
4. Please attach all the technical literature and a list of similar items supplied in india.
5. IIT Delhi is exempted from paying custom duty under notification No.51/96 (partially or fully) and necessary “Custom Duty Exemption Certificate” can be issued after providing following information.
6. Shipping details i.e. Master Airway Bill No. and House Airway No. (If exists), Forwarder details i.e. Name, Contact No., etc.
7. Custom Duty Exemption Certificate will be issued to the shipment in the name of the Institute and Bills of Entry should be submitted to IIT Delhi.
8. Either the Indian agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender. If an agent submits bid on behalf of the Principal/OEM, the same agent shall not submit a bid on behalf of another Principal/OEM in the same tender for the same item/product.
9. Three years comprehensive warranty should be provided and AMC price beyond 3 years should be mentioned separately.

10. Payment Options

- a. Letter of Credit: 90% payment against shipping documents & balance 10% after satisfactory installation. For large purchase i.e. costing over Rs. 1 crore, 100% payment be made through LC.
- b. Sight Draft: Payment against documents through bank.
- c. Against Delivery: Payment by wire transfer after receipt of material.
- d. Advance payment: pre-payment by wire transfer (for orders less than Rs. 5 lakh)