



**INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR  
KHARAGPUR-721302**

**SUB: PROCUREMENT OF GAS MASS FLOW METER**

Tender Notice No.: **IIT/KGP/CRYO/TKN/GMFM/2018-19/8** Date: **20.12.2018**

Indian Institute of Technology Kharagpur, an Institute of National Importance, invites sealed quotations from reputed Original Equipment Manufacturers (OEMs) or their Authorized representatives & General Suppliers for the supply of Gas Mass Flow Meter for Cryogenic Engineering Centre.

Interested vendors are requested to send their sealed bids under a **two cover system** as per requirement mentioned in tender document, along with the Technical Specifications & Compliance Certificate (as mentioned in **Annexure-I**) of the tender document.

Details are also mentioned in the Institute website [www.iitkgp.ac.in](http://www.iitkgp.ac.in) [link: **Tenders**].

The proposal has to be sent in a sealed packet, containing two separate sealed envelopes (**Technical Bid** and **Price Bid**) duly superscripted with Reference Number (**Tender Notice No. IIT/KGP/CRYO/TKN/GMFM/2018-19/8** Date: **20.12.2018**) to the Office of Prof. Tapas Kumar Nandi, Cryogenic Engineering Centre, Indian Institute of Technology, Kharagpur, P.O. Kharagpur Technology, PIN: 721302 *on or before 14.01.2019 (Monday) at 12:00 Noon.*

The **Technical Bids** will be opened on **14.01.2019 (Monday) at 4.00 pm** in the Meeting room of **Cryogenic Engineering Centre, IIT Kharagpur** in the presence of the vendors/or their authorized representatives. Price bids will be opened (to be notified separately) only of those firms, who will be found technically qualified/shortlisted, after evaluation of their technical bids.

  
Prof. Tapas Kumar Nandi  
PI, Cryogenic Engineering Centre, IIT Kharagpur

Encl: Annexure-I Copy

to:

1. Institute Website
2. Jt. Registrar (Stores & Purchase)
3. CPP Portal
4. Chairman, Purchase Committee
5. Notice Board

## Procurement of Gas Mass Flow Meter

It will consist of the equipment as per the specifications given in **Annexure-I**.

### TERMS AND CONDITIONS

1. Technical bid should contain all relevant technical details; printed technical leaflet of models quoted and other details, which may be necessary to ensure that the offer is complete in all respects, e.g., technical specifications, etc.
2. Technical bid should also contain a Compliance Certificate duly signed by the bidder.
3. PRICE may be quoted either in INR or in foreign currency. Where tenderer intends to quote in Indian Rupees (INR), the price should be quoted "FOR IIT Kharagpur" basis. The price should be all inclusive including GST. The unit price without tax and the tax breakups should be shown separately for each item (if applicable). Prices for software components, if any, must be shown as separate line items.
4. IIT Kharagpur is registered under DSIR, Govt. of India. GST rate for scientific goods is 5% as per the Notification No. 47/2017-Integrated Tax (Rate) dated 14<sup>th</sup> November, 2017. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder.
5. Where tenderer intends to quote in foreign currency FCA/FOB source port price by Air/Sea to be quoted. In case of comparison between FOR IIT Kharagpur (quoted in INR) and FOB/FCA price (quoted in foreign currency) 20% will be added on FOB/FCA price after conversion to INR.
6. IIT Kharagpur is eligible for exemption for payment of Customs Duties in terms of Government of India Notification No.51/96-Customs dated 23.07.96. Necessary certificate in this regard will be issued as per requirement and on request of the successful bidder.
7. Any particular items/products/ components/ sub-components may be procured independently from any vendor following standard purchase practices. All sub-components' pricing (1a, 1b, 1c, 1d, 1e, 1f(i), 1f(ii), 1g, 2, 3a, 3b, 3c) should be mentioned separately. The bidder may submit quotation even if an item/component/sub-component or multiple components/sub-components is/are unavailable with them.
8. Payment Terms: 90% Payment shall be made after successful installation of the Equipment/Accessories duly certified by PI, CNE\_OTG. Balance 10% may be released against submission of Performance Bank Guarantee to the tune of 10% of the total purchase order value. The Performance Bank Guarantee shall be issued from any Commercial Bank, which must remain valid for a period sixty days beyond the expiry of the Warranty Period. Bid security will be refunded back on submission of performance Security.





Through Letter of Credit/ Wire Transfer (after receipt of stores) for foreign principal. In case of Letter of Credit 90% payment will be made on submission of shipping documents and balance 10% payment will be made on installation, commissioning and submission of Performance Bank Guarantee for performance period. On behalf of the Principal, Indian Agent must be able to provide Performance Bank Guarantee.

9. Warranty: OEM Comprehensive warranty for 5 years from the date of successful installation of the equipment.
10. Delivery Period: The equipment should be supplied within 6 weeks from the date of Receipt of the Purchase Order.
11. Liquidated Damage: In the event of failure to deliver the stores beyond the specified date, liquidated damages @ 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.
12. Bid Submission: Technical Bid and Price Bid should be submitted in two separate sealed envelopes quoting reference number on the top of the envelope.
13. Acceptance of Tender: The authority of IIT, Kharagpur reserves the right to accept/reject any or the entire tender bids received without assigning any reason thereof.
14. Conditional offer will not be accepted.
15. Period of Validity: Bids shall remain valid for acceptance for a period of 120 days from the date of opening of the price bid. The benefit of downward prices (revision on account to budget/financial policy, tax revision, etc.) should be given to IIT Kharagpur by the selected OEM/vendor.
16. Past performance of the vendors will be judged at the time of Technical Evaluation.
17. The Institute does not bind itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.
18. Bidders should enclose the following documents:
  - i. Certificate of Registration/Trade License.
  - ii. PAN number and GST registration number.
  - iii. IT returns for the last three years.
  - iv. Copy of product literature technical leaflet, wherever applicable for which the prices have been quoted should invariably be closed.
  - v. Signed copy of the tender document, with company seal, agreeing to the terms & conditions and declaration.



19. **All tenders are to** be submitted or handed over to the office of **Prof. Tapas Kumar Nandi, Cryogenic Engineering Centre, IIT Kharagpur**. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future.
20. **The person/officer signing** the tender/bid documents should be delegated with an appropriate authority.
21. **Opening of Price Bids:** The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened. **The date for opening of price bids will be notified separately only to technically qualified vendors.**
22. Bidder or his/her authorized representative (with proper authorization letter for opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.
23. The addendum/corrigendum if any shall be published on Institute's Website and on CPP Portal.
24. The Institute at its discretion may change the quantity at any time before placing the order.
25. Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories, as appropriate, should be closed.
26. **Deviation from Specifications:** It is in the interest of the tenderer to study the specifications in the tender schedule thoroughly before quoting so that, if the tenderer makes any deviations, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements. Otherwise, your tender will not be considered at all.
27. **Guarantee:** The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications.
28. **Jurisdiction:** All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued i.e. Jurisdiction of KOLKATA HIGH COURT. Acceptance to this effect is also necessary at the time of opening of Technical Bid.
29. Agency Commission, if any will be paid to the Indian agents in Rupees on receipt of the equipment and after satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances.





30. **Tenderer(s), who are Indian Agents of OEMs:**

(a) Bidders should enclose/furnish the following documents /details:

- Port of shipment and Country of origin is to be provided for each item.
- Purchase order to be placed on: Should be mentioned in the quotation with full address.
- Complete address and tele links for contact persons of principals and Indian agent offices dealing with this purchase.
- Name and full address of the OEM's Banker and their swift code.

(b) Should furnish a clear declaration as follows: We declare that I am/we are Accredited Agents of the suppliers aboard. DGS & D enlistment certificate needs to be attached (applicable only for the Indian Agents)

31. **Important**

- (a) A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process.
- (b) The OEMs/Vendors need to submit a certificate  
That they are not currently debarred or blacklisted in IIT Kharagpur for any supplies, products or services, or at present in any national organization or educational institute/university.
- (c) In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.
- (d) For any query pertaining to this bid document, correspondence be addressed to:

Prof. Tapas Kumar Nandi  
Cryogenic Engineering Centre  
Indian Institute of Technology, Kharagpur 721302  
tkn\_cryo@cryo.iitkgp.ac.in  
Mobile: +91- 9434040897

- (e) In case the due date for submitting tender **happens to be a holiday, the same will be accepted on the next working day.** The timings will however remain unchanged. **Please Note that the Institute remains closed during Saturdays & Sundays.**



## Annexure-I

### Specification for gas mass flow meter

	<b>Specifications</b>
<b><i>Item description and No. of units:</i></b>	Gas mass flow meter, four numbers
<b><i>Measurement and Operating conditions:</i></b>	
Fluid	Multigas calibration including air, N <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> , He Ar, CO <sub>2</sub> etc.
Mass flow rate	0-500 slpm
Working pressure	20 bar max
Response time	Less than or equal to 10 ms
Warm up time	Nil, should be ready to use in 5 s
Accuracy	<1% of the reading, NIST traceable
repeatability	±0.2% full scale
Temperature	-10°C to 60°C
Reference condition	25°C and 1 atm pressure (STP)
Humidity range	0 to 100%
<b><i>Communication:</i></b>	
Display	Color TFT or Monochrome LCD wit integrated touch pad
Output	Mass flow, Volumetric flow, Pressure, Temperature RS-232 Serial / RS-485 Serial
Analog Output Signal	0-5 Vdc / 1-5 Vdc / 0-10 Vdc / 4-20 mA
Power	Suitable power supply/adaptor unit to be provided for operating the flowmeter using 220 V, 50 Hz AC supply line
<b><i>Tube Connection ports :</i></b>	3/4" NPT female
<b><i>Miscellaneous:</i></b>	All the cables e.g. to connect the flow meter to a desktop pc etc. to be provided. Print out operating instruction in English to be provided
<b><i>Warranty:</i></b>	Comprehensive warranty for 5 years
<b><i>After sales service:</i></b>	Details of after sales service including the service points in India should be provided.

