

प्लाज्मा अनुसंधान संस्थान INSTITUTE FOR PLASMA RESEARCH परमाणु ऊर्जा विभाग, भारत सरकार का एक सहायता प्राप्त संस्थान



An Aided Institute of Department of Atomic Energy, Government of India

इन्दिरा पुल के पास, भाट, गांधीनगर – 382 428 भारत दूरभाष: (079) 2396 2020/2021/2028 फैक्स: 91-079-23962277 वेब: <u>www.ipr.res.in</u> NEAR INDIRA BRIDGE, BHAT DIST. GANDHINAGAR - 382 428 (INDIA) Phone: (079) 2396 2000/2026/2332 Fax : 91-079-23962277 Web : <u>www.ipr.res.in</u>

ENQUIRY	
ENQUIRY NO Date	: IPR/EQF/18-19/223 : 12-03-2019
Due on	: 18-04-2019 by 1:00 PM IST

Please send your offer in sealed envelope specifying Enquiry No, Date & Due Date, ALONG WITH your credentials for the following items which we are interested to import directly against Foreign Trade Policy 2015-2020.

Important Note:

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to <u>importpurchase@ipr.res.in</u>

Please ensure your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following documents properly before quoting which are available on the IPR web portal i.e., <u>http://www.ipr.res.in/documents/tender_terms.html</u> / attached herewith.

- 1) Instructions to the bidders & Terms and conditions (refer Form No: IPR-FP-01.V3)
- 2) Bidding format

GST for Goods and Services (IGST/CGST/SGST TAX BENEFITS): Please refer **clause no:** 14 of Form No: **IPR-FP-01.V3**

QUOTATION SHOULD BE ADDRESSED TO PURCHASE OFFICER ONLY

Sr No	Description	Quantity
1	Digital Mass Flow Meter	1.0 Nos.
Note:		

Encl: As per attached.

Sd/-Mr. D. Ramesh Purchase Officer-II

Information to Vendors: We are working towards a single platform for our future requirement. Hence, please refer IPR website i.e, http://www.ipr.res.in/documents/tenderseng.html for our future requirement.

Digital Mass Flow Meter (DMFM)

S.No.	Parameter	Specification	
1	Principle of Operation	Thermal mass flow meter	
1.	Measured Parameter	Mass Flow-rate	
2.	Engineering Units	SCCM	
3.	Process Gases	Argon, Helium and Air (Same DMFM should be able to measure Argon, Helium & Air flow-rate)	
4.	Ambient conditions	20°C - 40°C and up to 80% RH	
5.	Operating Flow-rate	0-100 SCCM for all the gases mentioned in Sr.No-3	
6.	Operating Fluid Pressure	Up to 5 bar gauge	
7.	Operating Fluid Temperature	20°C – 40°C	
8.	Burst Pressure	At least 1.5 times of Operating fluid pressure as mentioned in Sr.No-6	
9.	Flow Configuration	Process gas/Flow-rate Engineering units shall be selectable/configurable using push-buttons / local interface and through application software for the instrument	
10.	Zero Adjustment	Shall be adjustable	
11.	Display	Integrated digital display for mass flow-rate indication with units	
12.	Input Power Supply	230VAC, 50Hz (necessary power adapter ,shall be provided by the vendor)	
13.	Calibrated Span	0-100 SCCM for all the gases (Sr. No-3)	
14.	Measurement Accuracy	Within $\pm 1\%$ of Calibrated Span including linearity for all the gases (Sr.No-3)	
15.	Repeatability	Within $\pm 0.25\%$ of Calibrated Span for all the gases (Sr.No- 3)	
16.	Signal Output	4-20 mA DC/ 0-5V DC / 1- 5 V DC for measured mass flow-rate	
17.	Process connection	1/4" NPT or 1/4" BSP	
18.	Material of Construction for all wetted Parts	Stainless Steel	
19.	Calibration Test Report	5-point NIST traceable calibration report is required for the DMF M within the operating flow-rate range	
20.	Leak Integrity	1×10^{-8} atm cc/sec of Helium or better	
21.	Application software	Required to interface & configure the DMFM with Windows OS compatible PC. Necessary interface cables shall be provided by the vendor.	
22.	Digital Communication	RS-232/485/LAN for configuration of flow meter using application software	

Note: Vendor shall clearly mention the model number and submit the detailed technical Specifications and brochure for the offered equipment along with the quotation.

1. <u>**Delivery of product:**</u> Product should be delivered within 12 weeks from the date of receipt of technically and commercially clear order.

2. <u>Documents:</u> Vendor shall submit detailed technical brochure, calibration test report (S. No. 19), helium leak integrity report (S. No. 20), operational manual with wiring and process connection diagrams for the equipment along with the shipment.

3. <u>Warranty/Guarantee:</u> Vendor shall provide a guarantee/warranty of minimum 1 (one) year for the equipment. The necessary guarantee/warranty certificate shall be sent to IPR along with the delivery of the equipment.

Bidder's Official Stamp and Sign:

Date: