



INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
Cryogenic Engineering Centre

INVITATION FOR TENDER

Ref: IITKGP/CRYO/TPL/IG/ TEMP-MONITOR/18-19/024

Date: 08-01-2019

Sealed tenders are invited in Two-bid System in two separate sealed envelopes (one for Technical specifications and the other for Commercial offers) from eligible Indian manufacturers/ suppliers or foreign manufacturers through their Direct Indian Agents for the supply of the following equipment,

- **Cryogenic Temperature Monitor** as per the technical specification given overleaf

If any Indian Agent quotes on behalf of Foreign Principal, in that case, as per GFR Rule, Vendor Registration Number from DGSD under Ministry of Commerce, Government of India, and copy of business agreement are to be submitted along with quotation (in the Envelope containing the Technical Bid) failing which the quotation would not be considered.

Both the envelopes must be sealed and should clearly be marked on top of envelope about type of envelope (i.e., technical/price bid), tender reference no. and name of agency submitting the bid. The technical bid should not have any price indication.

- These two envelopes, mentioned above, must be in a larger envelope with tender reference number and name of the agency clearly written over it.
- Bids, those are not following two-bid system, will be cancelled.

Please send offers, along with descriptive catalogue/brochure. The validity of the bid should be **at least 120 days** from the last date of submission. Please ensure that your quotation reaches this office not later **31st January 2019** at **16:00** hrs. at the following address:

Head of the Centre
Cryogenic Engineering Centre
Indian Institute of Technology Kharagpur
Kharagpur 721302, West Bengal, India

Kind Attention: Prof. Indranil Ghosh

Last Date of Submission of Quotation: **31st January (Thursday), 2019** at **16:00** hrs.

Validity: **120 days** from the last date of submission

Date & Time of Opening the Tender: **01st February (Friday), 2019** at **10:30** hrs

Copy to :

1. Institute website
2. CPP Portal
3. Chairman Purchase Committee
4. Jt. Registrar (S & P)

P. W. M.
08.01.19

Technical Specifications for Cryogenic Temperature Monitor

The proposed unit with the specification listed below needs to be standalone temperature monitor capable of measuring cryogenic temperature (using resistive sensors) and displaying the temperature readings (in Kelvin) or equivalent resistance (in Ohm).

1.	Highest operating temperature	325.00 K
2.	Lowest operating temperature	2.000 K
3.	Maximum number of temperature sensors to be connected concurrently	8
4.	Sensor support	RTD (Platinum, Rhodium-Iron, Germanium, Cernox) Diode (Silicon diode and GaAlAs Diode)
5.	Display	<ul style="list-style-type: none">• An integral digital panel meter• Simultaneous and continuous display of all data recorded in 8 channels• Capable of displaying the resistance in Ohm
6.	Temperature Display resolution	0.001° C for T<99K 0.01° C for 100 < T <325K
7.	Data reading rate	16 data in 1 second (minimum)
8.	Power requirement	240 VAC and 50 Hz
9.	Computer interface	IEEE-488 and RS-232C interfaces
10.	Software compatibility	LabView compatible and should be recognised by LabView software
11.	Test certificate	The manufacturer should provide the test certificate indicating measurement capability down to lowest temperature.


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Techno-commercial conditions

- A. Interested original equipment manufacturers or dealers or agents may submit their quotations in **two bid systems** (technical and commercial)
- B. **Warranty – minimum 1 year** from the date of delivery/ ~~installation and commissioning at site.~~
- C. Please provide the list of such supplied systems in India and abroad both in academics and industry
- D. **Validity** of the quotation should be 120 days from the date of submission.
- E. In the technical bid, vendors have to give a technical compliance certificate along with the technical literature.
- F. Compliance statement is to be submitted as per our technical specifications. Claim for compliance should be traceable to your brochure. Please mention page number etc. of your brochure for easy traceability.
- G. Commercial bid is to be provided in clearly marked separate sealed envelope.
- H. In any Indian Agent quotes on behalf of the Foreign Principal, in that case, as GFR Rule, vendor registration number from the DGSD under Ministry of Commerce, Government of India, and copy of business agreement is to be submitted along with quotation.
- I. **Last Date of Submission of Quotation: 31st January (Thursday), 2019 at 16:00 hrs.**
- J. **Date & Time of Opening the Tender: 01st February (Friday), 2019 at 10:30 hrs.**
- K. The envelope should have the following number on the top and submitted to the office of
Head of the Centre
Cryogenic Engineering Centre, IIT Kharagpur
West Bengal – 721302, INDIA
(Attn: Prof. Indranil Ghosh)
- L. Regarding this purchase, **the decision of the Director would be final and binding.**
IITKGP/CRYO/TPL/IG/TEMP-MONITOR/18-19/14 Dt. 08/01/2019
- M. Payment terms for foreign firms: **100% payment through irrevocable L/C.**
- N. Payment terms for Indian Firms
- 100% payment against delivery through electronic transfer.
 - Ensure mentioning:
 - i) Bank details of the beneficiary and PAN number
 - ii) Full name and address of the beneficiary on whom order has to be placed.


08.01.19

