

# NOTICE INVITING TENDER

Data logger with voltage and temperature measurement capability



Electrical Engineering  
Indian Institute of Science, Bengaluru

9th January 2025

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This is an invited global tender

## Section 1: Bid Schedule

1	Tender no.	IISc-EE-DL-20250901
2	Tender date	9th January 2025
3	Item description	Data logger with voltage and temperature measurement capability
4	Tender type	(i) Technical bid (part A) (ii) Commercial bid (part B)
5	Place of tender submission	Office of the Chairman Attn: Dr. Vishnu Mahadeva Iyer Department of Electrical Engineering Indian Institute of Science Bangalore – 560012 India
6	Last date and time for submission of tender	1st February 2025
7	For further clarification	Dr. Vishnu Mahadeva Iyer Room 319, Department of Electrical Engineering, Bangalore – 560012, India Email: <a href="mailto:vishnumi@iisc.ac.in">vishnumi@iisc.ac.in</a> Ph: +91-9739931102

## Section 2: Eligibility criteria

This is a Request for quote (RFQ) for procurement of **Data logger with voltage and temperature measurement capability** at the **Department of Electrical Engineering (EE), Indian Institute of Science, Bangalore.**

1. Only the Original Equipment Manufacturer or their authorized representatives across the globe shall participate in the bid.
2. The order will be placed only on the bidder who participated in the bid.

The deadline for submission of proposals is **1st February 2025 by 5:00 PM**. Proposals should arrive at the Office of the Chairman, Department of Electrical Engineering, Indian Institute of Science, Bangalore, Karnataka 560012, India.

### **Prequalification criteria:**

1. The OEM should have existence for a minimum of 10 years. (Enclose Company Registration Certificate)
2. The OEM should have a full-fledged service center in India.
3. The Bidder should have qualified technical service personnel for the instrument(s) based in India.
4. If the Bidder is a local distributor/dealer/agent, it is mandatory to attach an authorization certificate along with the technical bid from the original equipment manufacturer.
5. The bidder should sign and submit the declaration for Acceptance of Terms and Conditions as per -Annexure 4.
6. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect must be given as per Annexure 3.

## Section 3: Terms and conditions

### A) Submission of Tender:

1. All documentations in the tender should be in English.
2. Tender should be submitted in two envelopes (two bid system).
  - a. Technical Bid (Part-A) – Technical bid consisting of all technical details and check list for conformance to technical specifications. The proposal should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ below. The compliance table should include all the items in the same order and format. The first column should describe your compliance in a “Yes” or “No” response. If “No” the second column should state the extent of deviation. The “third” column should state the reasons for the deviation if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirements table below.(suppliers who include any indication of prices in the technical bid will be automatically disqualified).
  - b. Commercial Bid (Part-B) – Commercial bid indicating item wise price breakdown for the items mentioned in the technical bid, as per the format provided in tender, and other commercial terms and conditions.
3. The technical bid and price bid should each be placed in separate sealed covers, superscripting on both the envelopes the tender no. and the due date. Both these sealed covers are to be placed in a bigger cover which should also be sealed and duly superscripted with the Tender No, Tender Description & Due Date.
4. The SEALED COVER superscripting tender number / due date & should reach the Office of the Chairman, Department of Electrical Engineering, Indian Institute of Science, Bangalore – 560012, India on or before due date mentioned in the tender notice. In case due date happens to be holiday the tender will be accepted and opened on the next working day. If the quotation cover is not sealed, it will be rejected.
5. All queries are to be addressed to the person identified in “Section 1 – Bid Schedule” of the tender notice.
6. If price is not quoted in Commercial Bid as per the format provided in tender document the bid is liable to be rejected.
7. The Institute reserves the right to accept or reject any bid and to annul the bidding process and reject all bids at any time prior to the award of contract, without there by incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders.
8. Incomplete bids will be summarily rejected.

**B) Cancellation of Tender:** Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:

- a. To accept OR reject lowest tender or any other tender or all the tenders.
- b. To accept any tender in full or in part.
- c. To reject the tender, offer not confirming to the tender terms.

**C) Validity of the Offer:** The offer shall be valid 21 Days from the date of opening of the commercial bid.

**D) Evaluation of Offer:**

1. The technical bid (Part A) will be opened first and evaluated.
2. Bidders meeting the required eligibility criteria as stated in Section 2 of this document shall only be considered for Commercial Bid (Part B) opening. Further, agencies not furnishing the documentary evidence as required will not be considered.
3. Pre- qualification of the bidders shall not imply final acceptance of the Commercial Bid. The agency may be rejected at any point during technical evaluation or during commercial evaluation. The decision regarding acceptance and / or rejection of any offer in part or full shall be the sole discretion of IISc Bangalore, and decision in this regard shall be binding on the bidders.
4. The award of contract will be subject to acceptance of the terms and conditions stated in this tender.
5. Any offer which deviates from the vital conditions (as illustrated below) of the tender is liable to be rejected:
  - a. Non-submission of complete offers.
  - b. Receipt of bids after due date and time and or by email / fax (unless specified otherwise).
  - c. Receipt of bids in open conditions.
6. In case any BIDDER is silent on any clauses mentioned in these tender documents, IISc Bangalore shall construe that the BIDDER had accepted the clauses as of the tender and no further claim will be entertained.
7. No revision in the terms and conditions quoted in the offer will be entertained after the last date and time fixed for receipt of tenders.
8. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, preprocessing and post processing, optional items, recommended spares, warranty, annual maintenance contract.

**E) Pre-requisites:**

The bidder will provide the prerequisite installation requirement of the equipment along with the technical bid.

**F) Warranty:**

The complete system is to be under warranty period of minimum 5 years (year wise breakup value should be shown in the commercial bid) including free supply of consumables, spare parts, and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

**G) Annual Maintenance Contract:**

The bidder will provide an annual maintenance contract for a period of 2 years on completion of the warranty period.

**H) Purchase Order:**

1. The order will be placed on the bidder whose bid is accepted by IISc based on the terms & conditions mentioned in the tender document.
2. The quantity of the items in tender is only indicative. IISc, Bangalore reserves the right to increase /decrease the quantity of the items depending on the requirement.
3. If the quality of the product and service provided is not found satisfactory, IISc, Bangalore reserves the right to cancel or amend the contract.

**I) Delivery and Installation:**

The bidder shall provide the lead time to delivery, installation and made functional at IISc, Bangalore from the date of receipt of purchase order. The system should be delivered, installed, and made functional within 90 days from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed.

**J) Payment Terms:** The payment will be determined after mutual discussions with the successful bidder.

**K) Statutory Variation:** Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.

**L) Disputes and Jurisdiction:** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

**M) General:**

1. All amendments, time extension, clarifications etc., within the period of submission of the tender will be communicated electronically. No extension in the bid due date/time shall be considered on account of delay in receipt of any document(s) by mail.
2. The bidder may furnish any additional information, which is necessary to establish capabilities to successfully complete the envisaged work. It is however, advised not to furnish superfluous information.
3. The bidder may visit the installation site before submission of tender, with prior intimation.
4. All imported equipment should be quoted in the currency of the country of origin, and all locally sourced items should be quoted in Indian Rupees.
5. Any information furnished by the bidder found to be incorrect, either immediately or at a later date, would render the bidder liable to be debarred from tendering/taking up of work in IISc, Bangalore.

## Section 4: Technical details

S. No.	Parameter	Specification
1	Place where equipment /service to be supplied	Department of Electrical Engineering, Indian Institute of Science, Bangalore - 560012
2	Scope	Supply, Installation and Demonstration.
<b>Data logger with voltage and temperature measurement capability</b>		
3	Type of measurement channel	Each channel should be capable of measuring either voltage or temperature. The channels could be part of the data logger, or they could be part of external measurement modules that can be interfaced with the data logger. A screw type terminal block (2 terminals per channel), equipped with terminal block cover is preferred for each channel.
4	Voltage measurement	Each channel should be able to measure up to $\pm 100$ V DC.
5	Isolation requirements	The equipment should be suitable for medium-voltage environments (up to $\pm 1.5$ kV DC operating voltage and $\geq 4$ kV isolation voltage)
6	Maximum rated terminal-to-ground voltage	$\leq 1500$ V DC, measurement category III $\leq 1000$ V AC, measurement category III
7	Temperature measurement	Each channel should be compatible with one of the following types of thermocouples: K, J, E, T, N, R, S, B, C.
8	Data Refresh Interval	At least 100ms and up to 10 s
9	Measurement Range	10 mV f.s., 20 mV f.s., 100 mV f.s., 200 mV f.s., 1 V f.s., 2 V f.s., 6 V f.s., 10 V f.s., 20 V f.s., 60 V f.s., 100 V f.s., 1 to 5 V f.s Thermocouples: 100°C f.s., 500°C f.s., 2000°C f.s.
10	Maximum number of measurement channels	Need a total of 150 channels. Each channel should be capable of measuring either voltage or temperature.
11	Number of data loggers	$\geq$ Two. Each data logger should have the capability to support at least 75 channels or above and we need a total of 150 channels for the overall solution. The data loggers should be synchronized through an optical cable.
12	Communications interface(s)	LAN1, LAN2, CAN
13	Operating temperature	Temperature - $-10^{\circ}\text{C}$ to $50^{\circ}\text{C}$ ; Humidity - 80% RH or less
14	Storage Temperature	$-20^{\circ}\text{C}$ to $60^{\circ}\text{C}$ , 80% RH or less (non-condensing)
15	Storage media	SD card port and USB Interface (host)
16	External control terminals	Pulse/logic input, external sampling input, external I/O, alert output, CAN interface
17	Rack Configuration	Should be rack mountable and come with a rack. Dimensions of each data logger with 75 channels should be less than 380W x 180H x 280D mm
18	A/D Convertor resolution	Resolution: 18-bit or more
19	Future upgradability	Provision to increase the number of measurement channels by interfacing and synchronizing additional data loggers. Synchronization of up to 10 data loggers (each with a capability of measuring at-least 75 voltages or temperatures) is preferred. An optical interface is preferred for synchronization of data loggers.
20	Warranty	5 Years warranty is required. Clearly indicate your Annual Maintenance Contract (AMC) terms post warranty period along with the bid.
21	Power supply	An AC adapter should be provided to interface with 230 V, 50 Hz single phase supply outlet.
22	OEM capability	The OEM should have a calibration facility and full-fledged service center in India to cater to the needs of the Data Logger. Manufacturer to provide support in terms of repairs, post warranty period up till 5 years from the date of discontinuation of the product model.



23	Installation and Demonstration	The Bidder shall do the rack mounted installation of the equipment and give a complete demonstration of the instrument at the time installation about the complete functionalities and usage of the instrument. The equipment should come with factory calibration certificates.
24	Manuals	Complete operating instructions manual, operating manual, startup guides, communication interface and troubleshooting manuals shall be furnished along with the
25	Software	Suitable software or a logger utility should be provided for PC connectivity to easily control, monitor, record, analyze and save measured data from a Personal Computer. All the measurements should be accessible through a logger utility from a computer.
26	OEM/Bidder capability	<ul style="list-style-type: none"> <li>• The OEM should have existence for a minimum of 10 years.</li> <li>• The OEM should have a full-fledged service center in India to cater to the needs of the data logger and its accessories.</li> </ul> OEM to provide technical support in terms of repairs, post warranty period up till 5 years

## Section 5: Technical bid

The technical bid should furnish all requirements of the tender along with all annexures in this section and submitted to:

Office of the Chairman,  
Attn: Dr. Vishnu Mahadeva Iyer  
Department of Electrical Engineering  
Indian Institute of Science  
Bangalore – 560012, India

## Annexure 1

### Details of the Bidder

The bidder must provide the following mandatory information & attach supporting documents wherever mentioned:

### Details of the Bidder:

<b>Sr. no</b>	<b>Items</b>	<b>Details</b>
1.	Name of the Bidder	
2.	Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)	
3.	Registration No/ Trade License, (attach attested copy)	
4.	Registered Office Address	
5.	Address for communication	
6.	Contact person- Name and Designation	
7.	Telephone No	
8.	Email ID	
9.	Website	
10.	PAN No. (attach copy)	
11.	GST No. (attach copy)	

Signature of the Bidder

Name:

Designation, Seal

Date:

## Annexure 2

Declaration regarding experience

To,  
The Chairman,  
Department of Electrical Engineering  
Indian Institute of Science  
Bangalore – 560012  
India

Ref: Tender No:

Dated:

Supply and installation of \_\_\_\_\_

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company / firm has \_\_\_ years of experience in supplying and installing \_\_\_\_\_

(Signature of the Bidder)

Printed Name Designation, Seal Date:

## Annexure 3

Declaration regarding track record

To,  
The Chairman,  
Department of Electrical Engineering  
Indian Institute of Science  
Bangalore – 560012  
India

Ref: Tender No:

Dated:

Supply and installation of \_\_\_\_\_

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I am competent officer in my company / firm to make this declaration.

OR

I declare the following:

Sr. no	Country in which the company is Debarred /blacklisted / case is Pending	Blacklisted / debarred by Government / Semi Government/Organizations /Institutions	Reason	Since when and for how long
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(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully

(Signature of the Bidder)

Name Designation, Seal:

Date:

## Annexure 4

Declaration for acceptance of terms and conditions

To,  
The Chairman,  
Department of Electrical Engineering  
Indian Institute of Science  
Bangalore – 560012  
India

Ref: Tender No:

Dated:

Supply and installation of \_\_\_\_\_

Sir,

I have carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully  
(Signature of the Bidder)

Name Designation, Seal:

Date:

## Annexure 5

Details of items quoted:

- a. Company Name
- b. Product Name
- c. Part / Catalogue number
- d. Product description / main features
- e. Detailed technical specifications.
- f. Remarks

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.

## Section 6: Commercial Bid

S no.	Description	Cat. number	Quantity	Unit price	Subtotal
1.	Essential items noted in the technical specification				
1a.	... (details of essential items)				
1b.	...				
2.	Optional items noted in the technical specification				
2a.	... (details of optional items)				
2b.	...				
3.	Accessories for operation and installation				
4.	All Consumables, spares, and software to be supplied locally				
5.	Warranty (5 years)				
6.	AMC 2 years beyond warranty				

Any additional items

S No.	Description	Cat. number	Quantity	Unit price	Subtotal
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Addressed to:

Office of the Chairman,  
Attn: Dr. Vishnu Mahadeva Iyer  
Department of Electrical Engineering  
Indian Institute of Science  
Bangalore – 560012  
India

## Section 7: Checklist

(This should be enclosed with technical bid- Part A)

The following items must be checked before the Bid is submitted:

### 1. Sealed Envelope "A": Technical Bid

1. Section 5- Technical Bid (each page signed by the authorized signatory and sealed) with the below annexures:

- a. Annexure 1: Bidders details
- b. Annexure 2: Declaration regarding experience
- c. Annexure 3: Declaration regarding clean track record
- d. Annexure 4: Declaration for acceptance of terms and conditions
- e. Annexure 5: Details of items quoted.

2. Copy of this tender document duly signed by the authorized signatory on every page and sealed.

### 2. Sealed Envelope "B": Commercial Bid

#### Section 6: Commercial Bid

Your quotation must be submitted in two envelopes: Technical Bid (Envelope A) and Commercial Bid (Envelope B) superscribing on both the envelopes with Tender No. and due date and both in sealed covers and put in a bigger cover which should also be sealed and duly super scribed with Tender No., Tender description & Due Date.