

भारतीय प्रौद्योगिकी संस्थान धारवाड Indian Institute of Technology Dharwad

EXPRESSION OF INTEREST

No. IITDh/GA/CRF/2018-2019/11

EXPRESSION OF INTEREST (EoI) FOR PROCUREMENT of ELECTRICAL TESTING EQUIPMENT

1. **Introduction**

IIT Dharwad is an Institute of National Importance created by an Act of Parliament in 2016. IIT Dharwad has been steadily establishing its operations in its transit campus. Simultaneously, the institute is employing bright young and accomplished faculty. A number of unique research and development programs are on the anvil. The institute now needs to raise the levels of the capacity with the best of the facilities and infrastructure. This will provide highly talented and accomplished faculty to pursue not only their research but also think of innovative way of introducing instructional/teaching/learning solutions to practical problem of the students.

2. Objective

The objective of this invitation of Expression of Interest (EoI) is to seek responses from eligible Vendors for SUPPLY, INSTALLATION, COMMISSIONING, DEMONSTRATION and TRAINING OF ELECTRICAL TESTING EQUIPMENT AS PER ANNEXURE-I

3. Timelines

3.1 Major activities in the procurement process will be as given below: -

Sl No	Activity	Remarks	
(a)	Pre-Bid Meeting	To clarify the issues/ queries raised by intrested firms facilitate submission of bids.	
(b)	Deadline for submission of EoI	• Till 16.00 Hrs on 12/11/2018	
(b)	Issue of Tender Document	Only to the vendors who submit the response to the EoI. The tender document to such vendors will be sent via e-mail	
(c)	Submission of Tender Documents	Deadline for bid submission: Till 16.30 hrs on 03/12/2018(Tentative). Based on updated specifications and tender document	
(d)	Evaluation of Technical Bids	About 3 weeks (Tentative)	
(e)	Opening of Commercial Bids	The shortlisted bidders will be intimated by e-mail the schedule of opening of the commercial bids	
(f)	Award of Contract	The selected vendor will be awarded the contract.	

4.0 Material Description:

Electrical Testing equipment as per specifications described below in Annexure-I

4.1 Annexure-I

Technical Specification for Electrical Testing equipment

1) Dual channel source measure unit:

Dual Channel Programmable Current/Voltage Source measure unit with accuracy of 6 ½ digits and Multimeter for measurements. Source Voltage Range: 100nV to 200V, Source Current range from 1pA to 10A. GPIB connectivity and the interfacing Software should be included.

2) Real-Time Digital Storage Oscilloscope:

- (a) Number of Channels: at least 4.
- (b) Analog bandwidth of each channel: 20 GHz or more.
- (c) Real-time sampling rate: 50 GS/s or more for each channel (with all channels simultaneously ON).
- (d) Record length: more than 16 Million points (320 µs at maximum bandwidth) or more in each channel (it should be possible to easily record the waveforms, transfer them to a computer and access them in standard formats such as .csv).
- (e) Vertical resolution: At least 8 bits.
- (f) Effective number of bits: At least 4 (in the 1 MHz 20 GHz band).
- (g) Nominal input impedance: 50-ohm (nominal) single ended (or 100-ohm nominal, if differential).
- (h) AC coupling option should be available (if not available, separate DC blockers (operational up to 20 GHz) compatible with the oscilloscope should be included). (All hardware/software necessary for the above functionalities must be included with the oscilloscope).

3) RF Spectrum Analyzer:

- (a) Frequency Range: 100 kHz 40 GHz (at least this frequency range must be covered).
- (b) Analysis bandwidth: At least 1 GHz.
- (c) Provision to save time domain IQ waveform data (at least 1 Million time samples) on a USB drive and export into a CSV file.
- (d) Spectrum should not appear at the image frequencies
- (e) Should allow measurement of signals with DC contents of up to +/-10V (DC blockers should be provided separately if required).
- (f) Nominal Input Impedance: 50-ohm.
- (g) The unit should not be require external mixers for measurement.
- (h) RF input connector: Should allow input from 1.85 mm, 2.4 mm and 2.92 mm male connectors (suitable adaptors should be provided to match this requirement).
- (i) 40 GHz RF cables compatible with the RFSA of at least 1 meter length (3 nos.) with MALE connectors on both sides should be provided.
- (j) Phase noise measurement feature should be included.
- (k) Display: The equipment should have an in-built display.

DETAILS OF PRE-BID MEETING

To clarify the issues/queries raised by intrested firms and to facilitate in submission of bids, the pre-bid meeting would be held as follows:

Place	Time	Date
Board Room, Admin Building,	16.00 Hrs	12/11/2018
IIT Dharwad		

PROCEDURE FOR SUBMISSION OF RESPONSE TO THE EoI

The response to the EoI should reach IIT Dharwad on or before 12/11/2018 by 16.00 hrs on the following address:

The Assistant Registrar IIT Dharwad P.B. Road, Near High Court, Dharwad-580011

Or can be forwarded by e-mail at pro@iitdh.ac.in on or before 12/11/2018 by 16.00 hrs.

For any queries, you may reach us at 0836-2212839

Please acknowledge the receipt of this invitation for EoI

Sd/-Assistant Registrar IIT Dharwad