वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद् Council of Scientific & Industrial Research राष्ट्रीय वांतरिक्ष प्रयोगशालाएं National Aerospace Laboratories



INVITATION FOR BIDS/NIT

Tender No. NAL/PUR/STTD/113/20-Y

Dated: 10-Aug-2020

CSIR- National Aerospace Laboratories (NAL), Bengaluru, India is one of the premier laboratories under Council of Scientific and Industrial Research (CSIR), an autonomous body under Department of Scientific and Industrial Research, Government of India, New Delhi. CSIR-NAL is a Science and Knowledge based Research, Development and Consulting Organization. It is internationally known for its excellence in Scientific Research in Aerospace Engineering.

The Director, CSIR-NAL invites online quotation for procurement of the following item(s) for day to day research work.

SI.No.	Description of Items HIGH-SPEED DAS ONBOARD/OFF BOARD. Please refer Annexure for detailed specification		Unit	Quantity 01
1			No	
Single	/ Double Bid	Single		

Bid Security (EMD) (in INR)	Bid Security Declaration should be enclosed with quotation.
Performance Security	10% of the purchase order value

- 01. Tender Documents may be downloaded from Central Public Procurement Portal <u>https://www.etenders.gov.in</u>. Aspiring Bidders who have not enrolled/ registered in e- procurement should enroll/ register before participating through the website <u>https://www.etenders.gov.in</u>. The portal enrolment is free of cost. Bidders are advised to go through instructions provided at 'Instructions for online Bid Submission'.
- 02. Tenderers can access tender documents on the website (For searching in the NIC site <u>https://www.etenders.gov.in</u>, kindly go to Tender Search option, select tender type and select ' Council of Scientific and Industrial Research' in organization tab and select NAL-Bengaluru-CSIR in department type Thereafter, Click on "Search" button to view all CSIR-NAL, Bengaluru tenders). Select the appropriate tender and fill them with all relevant information and submit the completed tender document online on the website <u>https://www/etenders.gov.in</u> as per the schedule given in the next page.
- 03. Either the Indian Agent on behalf of the Foreign principal or the Foreign principal can bid directly in a tender but not both. However, the offer of the Indian Agent should also accompany the authorization letter from their principal. To maintain sanctity of tendering system, one Indian Agent cannot represent two different Foreign principals in one tender.
- 04. Unsolicited / conditional / unsigned tenders (Quotations) **shall not** be considered. Quotations received after the due date and time **shall be summarily rejected**.
- 05. The Bidder shall comply the terms and conditions of the tender, failing which, the offer shall be liable for rejection.
- 06. The Director, CSIR- National Aerospace Laboratories., Bengaluru reserves the right to accept any or all the tenders either in part or in full or to split the order without assigning any reasons there for.



पी बी सं. 1779, एचएएल एयरपोर्ट रोड, कोडिहल्ली, बेंगलुरु - 560 017, भारत, P B No 1779, HAL Airport Road, Kodihalli, Bengaluru - 560 017, INDIA फोन / Phone : (का./ Off) : +91 - 80 - 2508 6040 - 45, फैक्स / FAX : +91-80-2526 9611



CSIR-National Aerospace Laboratories, Bengaluru-560 017, INDIA

SCHEDULE CUM CRITICIAL DATE SHEET

1	Name of Organization	CSIR-National Aerospace Laboratories, Bengaluru	
2	Tender Reference No	NAL/PUR/STTD/113/20-Y dated: 10-Aug-2020	
3	Tender Type (Open/Limited/EOI/Auction/Single)	Open Tender	
4	Type/Form of Contract (Work / Supply / Auction / Service / Buy / Empanelment / Sell)	Supply	
5	No of Covers (One/Two/Three/Four)	One	
6	Tender Category (Services/Good/Works)	Goods	
7	Allow Resubmission (Only in online mode within scheduled period)	Yes	
8	Allow Withdrawal (Only in online mode within scheduled period)	e mode Yes	
9	Allow Offline Submission	No	
10	Work Item Title	HIGH-SPEED DAS ONBOARD/OFF BOARD	
11	Work Description	HIGH-SPEED DAS ONBOARD/OFF BOARD	
12	Delivery Schedule	30 days from the date of purchase order	
13	Product Category (Civil Works / Electrical Works / Fleet Management / Computer Systems)	R & D Equipment	
14	Is Multi Currency Allowed	Yes	
	a) Tender Publishing Date -	11-Aug-2020	1800 Hrs
	b) Document Download Start Date-	11-Aug-2020	1800 Hrs
15	c) Bid Submission Start Date-	11-Aug-2020	1800Hrs
	d) Bid Submission End Date-	31-Aug-2020	1000 Hrs
	e) Bid Opening Date-	01-Sep-2020	1100 Hrs
16	Bid Validity Days	90 days	
17	Address for communication	Stores and Purchase Officer CSIR-National Aerospace Laboratories, HAL Airport Road, Kodihalli, Bengaluru - 560017	
18	Inviting Officer	Director, CSIR-NAL	
19	Contact No	25086040, 25086041	
20	E-mail Address	purchasek@nal.res.in	
21	Detailed specification of item	Refer Invitation for bids / NIT	
22	Tender Terms & Conditions & Instruction for online bid submission	The prospective bidders are requested to refer to the Standard Tender Document available on NAL Internet (<u>www.nal.res.in</u>) under the icon Tender- Purchase before formulating and submitting their bids	

NAL/PUR/STTD/113/20-Y

Number of DAS	1	
Minimum Channels	Option 1: 3 Channels Option 2: 6 Channels (Quote Separately for both options)	
Transducer types	Accelerometers (piezoresistive and Capacitive) Load cells and Moment Load cells Strain gauge (Quarter bridge (350 Ohm)) Pressure sensors (See optionals)	
Excitation	2 .5V/5V/10V/15V	
Maximum Size	35mm X 35mm X 10mm (for each stack or DAS)	
Anti-Alias Filter Response	Meets SAE J211 Requirements	
Digital Filters	Digital filters (Standard SAE filters) should be available in the software for processing data (like accelerometer).	
Trigger	Internal as well as external	
Maximum Sampling rate for each channel (See Note)	500 kilo samples/sec	
Minimum Shock resistance	500 g, 4 msec (half sine wave)-5000g	
Minimum Resolution	16 bit A/D	
Power	AC/DC	
Software	GUI for acquisition (See optionals)	
OPTIONALS (Quote Seperately)		
transducer types	 Strain gauge (half bridge) Angular rate sensors Current Frequency 	

Specifications for On Board Miniaturized Data Acquisition System



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Software	Auto calibration with shunt resister for strain gauge with Quarter/half/full bridge configuration	
Additional requirements	 Automatic sensor assignment Detailed channel diagnostics Real time data display External hardware driven trigger Software controlled auto gain option All inputs electrically isolated. PC connection through Ethernet / USB. 	

Note:

- 1) Charges should be inclusive of demonstration and training for use of the acquisition and software.
- 2) If DC power (battery) is used, the battery should be provided along with the charger.

3) Connectors should be provided for the quarter bridge strain gauge which can be attached to the DAS connectors.

4) Minimum Guarantee period of 12 months.



BID-SECURING DECLARATION FORM

Date: _____

Bid No.

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of one year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

(a)	have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
(b)	having been notified of the acceptance of our Bid by the purchaser during the period of bid validity
	(i) fail or refuse to execute the contract, if required, or
	(ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of (insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of: (insert complete name of Bidder)

Dated on _____ day of _____(insert date of signing)

Corporate Seal (where appropriate)

Note:

- 1. In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid.
- Bid Security declaration must be signed in by the Proprietor/CEO/MD or equivalent level of Officer of the company.