

Department of Ocean Engineering (DOE)

IIT Madras, Chennai-600036, TN

17th October 2018

FIELD INSTRUMENT FOR SURVEYING

Due date:

- * Submission of technical and commercial proposal: On or before **1st November 2018@15:30 hrs.**
- * Bid opening: **1st November 2018@16:00 hrs.**

1. Quotations are invited in duplicate for the item shown in enclosed list as Annexure 1.
2. The quotations must be submitted under two bid system indicating clearly technical bid and financial bid on the envelope. Both the bids should be closed in the single envelope in a sealed cover.
3. The Quotations duly sealed and super scribed on the envelope with the reference No. and due date, Should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
4. The Quotations shall be valid for 90 days from the due date and the period of delivery, warranty terms etc. should also be clearly indicated. A minimum of one year warranty is required.
5. Brochure detailing technical specifications and performance, list of industrial and educational establishments where the items enquired have been supplied must be provided.
6. Compliancy certificate is to be provided indicating conformity to the technical specifications.
7. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples / machine/ equipment if called for should be submitted / demonstrated at free of charges, and collected back at the supplier's expenses.
8. Packing and delivery charges must be clearly indicated.
9. The rates of GST and other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for GST/General Taxes will be admitted at any stage and on any ground whatsoever.
10. IIT Madras is eligible for concessional GST. Relevant certificate will be issued. In case of Imports, the price should be quoted without custom duty. IIT Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty. In case of import supply, the price should be quoted on EX-WORXS and CIP basis indicating the mode of shipment.
11. Goods should be supplied carriage paid and insured.
12. Goods shall not be supplied without an official supply order.
13. Payment: Every attempt will be made to make payment within 30 days from the date of receipt of bill/ acceptance of goods, whichever is later.
14. **Acceptance and Rejection:** - IIT Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.



Yours faithfully,

LiDAR Scanner — INo

Ref: OED/2018/013/Project/VSRP

LiDAR Scanner and including all primary accessories. Find the specifications below:

Application	Indoor and Outdoor for free surface wave elevation/Run-up measurement in Ocean Environment.
Proven Track record	The LiDAR Scanner Model should have been proved for the above applications.
Resolution power	High Resolution
Light source	Infrared
Scanning frequency	In the range of 25 Hz - 100 Hz
Angular Resolution	Between 0.2° to 1° with suitable steps
Heating	Yes
Working range	Minimum 1m and Maximum 50 m
Max. range with 10 % reflectivity	26 m
Spot size	Minimum 4.7 mrad
Amount of evaluated echoes	5
Fog correction	Yes
Performance	
Response time	≥ 10 ms
Detectable object shape	All
Systematic error	± 30 mm (for range up to 10 m)
	± 45 mm (for range from 10m)
Statistical error	10 mm (for range up to 10 m)
	12 mm (for range from 10 m)
Interfaces	
Ethernet	TCP/IP
Data transmission rate	10/100 MBit/s
Serial	RS-232 or RS-422
Data transmission rate	9.6 kBaud to 500 kBaud
CAN	Required
USB	Required
Data transmission rate	9.6 kBaud to 500 kBaud
Switching inputs	Minimum 4 (Encoders)
Switching outputs	Minimum 6
Optical indicators	Minimum 5 LEDs (Additional 7-segment display)
Mechanics/Electronics	

Electrical connection	Standard
Operating voltage	24 V DC
Weight	Not more than 5 kg
Ambient data	
Object remission	2 % ... > 1,000 % (reflectors)
Ambient operating temperature	Upto 40 °C
Storage temperature	Upto 40 °C

2. Prerequisite

The vendor has to submit proof of documents for similar LiDAR Scanner supply in India. In addition, the proof of documents for successful completion of at least two supplies of same LiDAR Scanner should be submitted.

3. Payment terms

Please specify the payment terms. IIT Madras reserves the right to negotiate the terms of payment as acceptable to the purchase procedures prevalent from time to time.

4. Terms and conditions

Please quote the rate with the following details.

1. Quotation validity minimum 90 days.
2. Submission of Methodology, Delivery and commissioning periods. Tax details.
- 3.

5. Force Majeure

Neither the Agency nor the owner shall be considered in default in performance of its obligations hereunder if such performance is prevented or delayed for any causes beyond the reasonable control of the party affected, such as war, hostilities, revolution, riots, civil commotion, epidemic, major fires, explosions, floods, earthquakes or because of any law, order, proclamatory regulations or ordinance of Government, provided notice in writing of such cause with necessary evidence that the obligation under the Contract is thereby affected or prevented or delayed, is given within 14 days from the happening of the event and in any case it is not possible to serve the notice within the said 14 days period, then within the shortest possible period without delay.

As soon as the cause of Force Majeure has been removed, the party whose ability to perform its obligation has been affected shall notify the other party the actual delay occurred on account of such activities.

Although the time for completion of work shall be suitably extended (not exceeding the period during which the work was stopped on account of Force Majeure clause), such extension shall not result in any financial claim by the Agency against the Owner on any account of such a delay for any other reason whatsoever.

- Pre-bid meeting will be held on 26th October 2018@3.30 pm
- Venue: Department of Ocean Engineering, IIT Madras.

Proposal send to following Address:-

Dr.V.Sriram,
Associate Professor,
Dept. of Ocean engineering,
IIT Madras,
Chennai-6000036.