



National Technology Centre for Ports, Waterways & Coasts.
(NTPWC)
No.606, 6th floor New academic complex
IIT Madras -Chennai -600036.
Phone: 22578917

Ref: No. PROJECT NO.OEC/18-19/160/MOSH/KMUR
Tender ref no. NTPWC/echosounder/001

DATE: 26.11.2018

Item Description : Single beam echo sounder-1no (as per specification attached)

Due date : 10.12.2018 at 3.00 P.M.

Dear Sir,

1. Quotations/Tender with compliance sheet are invited in duplicate for the various items shown below/overleaf/**enclosed list**.
2. The quotations are to be in **two parts as Technical Offer and as Commercial offer**:
The two parts of the offer are to be clearly marked on the envelopes. The two parts of the offer in separate envelopes must be enclosed in the one bigger envelope duly sealed and super scribed with reference number and due date and must be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. Fax and Email quotation are not acceptable.
4. Quotations should be valid for 90 days from the due date and period of delivery required, warranty terms etc. should also be clearly indicated. Warranty clause will be as said in the specification.
5. Imported supplies should be quoted **for CIP chennai basis indicating mode of shipment**.
6. Local firms to quote for free delivery to this Institute. If quoted for Ex-Godown delivery charges be indicated separately.
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. Compliancy certificate is to be provided indicating conformity to the technical specifications
8. Sales Tax/General Taxes/ED if applicable and such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. If this is not indicated no such claim will be admitted at any stage. The taxes leviable should take into consideration that we are entitled to have concessional Sales Tax applicable to Non-Government Educational Institutions run with no profit motive for which a concession is given. Sales Tax Certificate will be issued at the time of final settlement of the bill.
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. If the item is under DGS&D Rate contract No. and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the Rate contract price (Please note that we are not Direct Demanding Officers). If so please send copy of the RC.
12. The Guarantee period of the item may be indicated clearly.
13. No Advance payment will be made for Indigenous purchase. However 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done). (IIT Madras is exempt from payment of Excise Duty and is eligible for concessional rate of custom duty and GST for 5%. Necessary certificate will be issued on demand. IIT Madras will make necessary arrangements for the clearance of imported goods at the Airport/Seaport. Hence the price should not include the above charges.
14. **Acceptance and Rejection**:- I.I.T. 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.
15. **All tender amendments will be uploaded on the website only**. Bidders should keep themselves updated & conditions mentioned in the specification needs to be strictly followed

Tenders to be addressed to :

The project co-ordinator, NTPWC, room no.606, 6th floor new academic complex, IIT Madras, Chennai- 600036

TENDER SPECIFICATION OF SINGLE BEAM ECHO SOUNDER

1. The Scope of the supply

Supply of the one numbers of Single Beam Echo Sounder with suitable accessories

2. Requirements

The Single Beam Echo Sounder is required to carry out the bathymetry survey in Ocean/Sea, Lake, River, Streams and any Water body.

3. Technical Specification

| Sl.no | Parameter | Description/Range |
|-------|--|---|
| 1 | Type | Portable Single Beam dual Frequency Echo Sounder |
| 2 | Quantity | 1 set |
| 3 | Frequency 1. Low band 2. High band | 1. Low: 24 kHz – 50 kHz 2. High: 100 kHz – 340 kHz (Dual channel selectable with simultaneous operation) |
| 4 | Depth range | Up to 200m or better |
| 5 | Depth Accuracy | 0.1m ± 0.1% of depth at low band 0.01m ± 0.1% of depth at high band |
| 6 | Scaling mode | Autoscaling |
| 7 | Transmit rate | Upto 10Hz |
| 8 | Blanking | 0 to full scale |
| 9 | Resolution | 0.01m |
| 10 | Sound Velocity | 1400 – 1700 m/sec at 1 m/s resolution |
| 11 | Update Rate | 100 millisecond or better |
| 12 | Clock | Internal backed time, elapsed time & date clock |
| 13 | Heave compensation | Through Motion sensor interface |
| 14 | Transducer Cable (Minimum) | 10m |
| 15 | Transducer Draft offset | 0 to 10m |
| 16 | Power | 12V or 24 V DC (nominal) < 15 watts |
| 17 | Storage Media / Memory | Internal Removable Storage 32 GB or more |
| 18 | Protection | IP65 Rugged & Tough Construction |
| 19 | Temperature | 0°C to 50°C |
| 20 | Output power | Low band <500W rms High band <400W rms |
| 21 | Transducer Housing | Preferably brass or longer longevity with proof |
| 22 | Connectivity & Interface | Input & Output <ul style="list-style-type: none">• 2 x RS 232• Input from Laptop, Motion sensor• Outputs to external computer• Ethernet interface• Compatible with Hypack/Teledyen PDS• Heave and sound sentence• Ethernet interface• Parallel port interface for printer |

| | | |
|----|---|--|
| 23 | Internal storage | 32GB SD Flash |
| 24 | Compatibility | DGPS, Hypack/Teledyen PDS/HydroPro |
| 25 | External computer | <ul style="list-style-type: none"> Industrial grade laptop is installed with driver where Teledyen PDS/Hypack Industrial grade,i5 processor or similar,8GB RAM,13.3 inch LED display or better,500GB,Windows OS |
| 26 | Digital Data Loggings | Depth data can be logged to a file along with all NEMA output |
| 27 | Output Formats | NMEA, ASC II |
| 28 | Instrumentation spares (Spares list to be quoted as an option.) | Standard tool kit must be provided. Essential spares and consumables for the operation to be included in the offer. |
| 29 | Manuals,Technical literature | <ul style="list-style-type: none"> Two sets of manual copies with complete technical details such as circuit description, detailed wiring diagrams. The servicing manual, Overall system, faultfinding flow charts, diagnostic flow charts to be provided, wiring details between different units to be made available to the IITM. All necessary details such as drawings, dimensions, weights and power consumption of the system/subsystems to be provided along with the quote to facilitate assessment related to space and power requirements. |
| 30 | Software | <ul style="list-style-type: none"> Teledyne PDS/Hypack (Activated for Echo sounders,DGPS & motion sensors etc.,) for real time monitoring,data recording Depth simulator of GUI/ Teledyne PDS/Hypack in which depth can be varied using front panel control,simulator program also should be able to test most circuitry of the system |
| 31 | Mounting accessories | <ul style="list-style-type: none"> Water proof glands for the transducer if required Steel rod/pipe to support the transducer housing and accommodate cable/glands |
| 32 | Moulder case | <ul style="list-style-type: none"> Moulded case needs to be provided for Echo sounder and transducer |
| 33 | Standard | <ul style="list-style-type: none"> Compliance to IHO Standards EN60529, IP65, EMC-EN60945, CE |
| 34 | Warranty | 1 Year |
| 35 | Note: 1. AMC Cost for the echo sounder unit (Optional): | |

| | |
|--|----------------------|
| | 1 st yr = |
| | 2 nd yr = |
| | 3 rd yr = |
| | 4 th yr = |
| | 5 th yr = |

4. Eligibility

The bidder must have a strong presence of at least 10 years in the Indian market and Should have supplied similar type of equipment to a govt agency

5. General

Items to be supplied along with calibration/test certificate.

6. Specification test

Specification of all items to be ensured by IITM before acceptance of the same.

7. Training

Hands on training to be provided to get operating knowledge of the items.

8. Dispatch

All items should be properly packed in the suitable box and it should be dispatched to NTCPWC, IITM, Chennai 36

9. Delivery

Items should be supplied within 8-12 weeks from the date of receipt of purchase order.

10. Validity

The offer should be valid for 90 days.

Contact details for technical clarification.

Leofelix.d@gmail.com.

