

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

DEPARTMENT OF **Centre for System Design**
 POST SRINIVASNAGAR, MANGALORE – 575 025 (D K)
 Phone: (0824) 2474000. Fax: (0824) 2474033
 E- mail: info@nitk.ac.in Website: <http://www.nitk.ac.in>



TENDER DOCUMENT

Notification. No:NITK/CSD/2023/SERB/KVG/SL-04

Dated:20-04-2023

Name of Goods	Underwater Sonar
Estimated Amount:	₹ 2,10,000.00 (including GST) (Refer Section 1B,21
Time for Supply of item after release of Purchase order	7 days after receiving Po.
Document Download / Sale Start Date	20/04/2023,5.00 p.m
Clarification Start Date	Nil
Clarification End Date	Nil
Bid Submission Start Date	20/04/2023,5.00 p.m
Last Date for submission of bids	10/05/2023,5.00 p.m
Bid Opening Date	11/05/2023,5.00 p.m
Address for Submission of bids	Dr.Pruthviraj U Assistant Professor, Dept. of Water Resources & Ocean Engineering NITK Surathkal-575025 (M):9972797225, Pruthviu@nitk.edu.in



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NOTICE INVITING QUOTATION (NIQ)

The National Institute of Technology Karnataka, Surathkal (in short – NITK, Surathkal) is an Institute Of National Importance Under Ministry of Education Govt of India, imparting Technical Education and engaged in Research Activities. It is proposed to procure the items for the departmental academic/research activities.

Sealed Quotations as per the Price Schedule given in this NIQ are invited for the following items subject to the terms and conditions, from the reputed manufacturers or its authorised dealers so as to reach on or before scheduled date and time. The quotations in the firm's Business letter head should be address to the "Director, NITK, Surathkal". The envelope shall be superscribed with the Quotation Notification Number and the Name of the Goods for which quotation is submitted.

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**Sd/-
HOD**

Note: Institute shall not be responsible for any postal delay about non-receipt /non-delivery of the bids or due to wrong addressee.

SECTION-1
Terms and Conditions

1. The rates should be quoted for preferably FOR destination from supply within India.
2. The bidder shall indicate the excise duty exemption for the goods if applicable.
3. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any. The rate should be quoted in INR only
4. Rate quoted should be inclusive of Testing, commissioning and Installation of equipment and Training.
5. Payment: No advance payment will be made. Payment will be made only after the supply of the item in good and satisfactory condition and receipt of performance security by supplier.
6. Guarantee/Warranty period should be specified for the complete period should be specified in section 3 of this tender document.
7. Period requirement for the supply and installation of item should be specified in section 3 of this tender document.
8. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.

SECTION-2
SCHEDULE OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS
[To be filled up by the Department / Centre of NITK, Surathkal]

Item(s) Name to be Procured : **Underwater Sonar**

Brief Specifications of the Item(s)
(Attach Additional Sheet if necessary) : **As per Annexure "D"**

Quantity : 1 No.

Any other details / requirement : N.A

Warranty Period required : 1 Year

Delivery Schedule expected
after placement of Purchase order
(in Weeks) : 1 Week

SECTION 3
PRICE SCHEDULE

[To be used by the bidder for submission of the quotation]

-
1. Item Name :
 2. Specifications
(Conforming to Schedule of requirements
Enclose additional sheets if necessary) :
 3. Currency and Unit Price :
 4. Quantity :
 5. Item Cost (Sl No. 3 * Sl. No. 4) :
 6. Taxes and Other Charges :
(i) Specify the type of taxes and duties
in percentages and also in figures.
(ii) Specify Other Charges in figures.
 7. **Warranty Period** :
(Conforming to the Schedule of requirements)
 8. Delivery Schedule :
(Conforming to the Schedule of requirements)
 9. Name and address of the Firm for
placing purchase order :
 10. Name and address of Indian authorized
agent (in case of imports only) :

Signature of the Bidder: _____

Name and Designation: _____

Business Address : _____

Place: _____

Date: _____

Seal of the Bidder's Firm

SECTION 4
CONTRACT FORM

[To be provided by the bidder in the business letter head]

1. (Name of the Supplier's Firm) hereby abide by the delivery schedule mentioned in this document for supply of the items if the purchase order is awarded.

2. The item will be supplied conforming to the specifications stated in this document without any defect and deviations.

3. Warranty will be given for the period mentioned in this document and service will be rendered to the satisfaction of NITK, Surathkal during this period.

Signature of the Bidder: _____

Name : _____

Business Address : _____

Place :
Date :

Seal of the Bidder's Firm

TECHNICAL SPECIFICATION : UNDERWATER SONAR

The unit must include following components

1. Sea bed classification system
2. Echo Sounder
3. Transducer
4. GPS
5. Power Supply
6. USB & RS232 Cables - support wireless communication
7. Weather proof storm case – Fabricated & Machined inside

Sea Bed Classification System Specifications

The sea bed classification system enables the hydrographic surveyor to create color coded seabed material maps in 2 or 3 dimensions in real time. The unit is a self-contained portable, seabed classification system designed to be used on board small vessels when no dedicated survey vessel is available.

Unit comes with its own built-in color echo sounder and is available for single or dual frequency operation.

Position, Time, Depth & Sea bed classification data are logged at regular intervals to a computer file, which can be exported to a Geographic Information System (GIS) for further analysis. GIS analysis can be used to determine benthic habitat boundaries & bathymetry whilst displaying the differences between successive surveys. Such Spatial & Time series analysis is necessary for long term monitoring & management needs.

Key features:

- Portable & Self contained unit.
- Robust construction.
- Dual frequency system, 50/200 kHz
- Real time sea bed material classification.
- Ease of installation.
- Data export to GIS.

For any technical clarifications contact : Dr. Pruthviraj U, 9972797225,
pruthviu@nitk.edu.in

Echo Sounder Specifications

Display Unit	5" TFT color LCD or bigger
Pixel number	VGA 480 x 640 or better
Frequency	50 and 200 kHz
Transducer	600 W
Range Scale	2-1200 m
Pulse length & PRR	0.04-3 ms, Max 3,000 pulse/min

Display Mode	Single frequency (50 or 200 kHz), Dual frequency, Zoom, Nav data, A-scope, Marker zoom, Bottom zoom, Bottom-lock, Bottom Discrimination, ACCU-FISH™, RezBoost™
Waterproofing	IP56
Power Supply	12-24 VDC, 11-0.5 A

Transducer Specifications

Bronze Thru-Hull Transducer, 600W (10-Pin)

Beam Angle	46 and 10 Degrees
Housing Type	Bronze
Power Rating	600 W
Frequency	50 and 200 kHz
Install Type	Thru Hull

GPS Specifications

Display type	Transflective, 65-K color TFT
Waterproof	Yes
Battery life	20 hours
Memory/history	1.7 GB
Maps & memory	
Ability to add maps	Yes,
Base map	Yes,
Automatic routing (turn by turn routing on roads) for outdoor activities	Yes (with optional mapping for detailed roads)
External memory storage	Micro SD™ card
Waypoints/favorites/locations	2000

Navigation track log	10,000 points, 200 saved tracks
Navigation routes	200
Sensors	
High-sensitivity receiver	Yes, Available
Outdoor recreation	
Area calculation	Yes,
Hunt/fish calendar	Yes,
Sun and moon information	Yes,
Geo caching - friendly	Yes,
Custom maps compatible	Yes,
Picture viewer	Yes,