

NATIONAL INSTITUTE OF TECHNOLOGY KARNATAKA, SURATHKAL

DEPARTMENT OF Centre for System Design

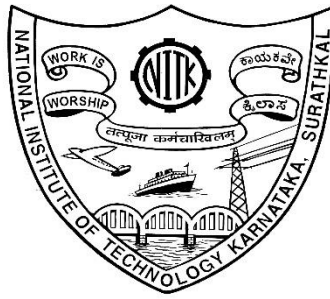
POST SRINIVASNAGAR, MANGALORE – 575 025 (D K)
A DEEMED UNIVERSITY

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NOTICE INVITING QUOTATION

Quotation Notification. No. NITK/CSD/MRPL/2020/OEMK/PU-04 Date: 04-12-2020

Name of Goods : **Outboard Electric Motor Kit**

Time for Supply of item
after release of Purchase order : 45 Days.

Last Date for submission of Quotation : **21-12-2020 before 3.00 PM**

Address for Submission of Quotation : Dr. Pruthviraj U
Assistant Professor,
Dept. Of Water Resources & Ocean Engineering,
NITK, Surathkal – 575025
Ph:0824-2474000, Extn:3313
(M): 9972797225
Email I'd: 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 autonomous body under Ministry of HRD Govt of India, a Deemed University, 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 authorized 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.

**1. Name of Goods: Outboard Electric Motor Kit
(Specifications are annexed to this NIQ)**

2. Time for completion of Supply after release of Purchase Order: 45 days

3.. Last date at time for submission of quotation : 21-12-2020 before 03:00 PM

4. Quotations to be submitted at the following address: Dr. Pruthviraj U
Assistant Professor,
Dept. Of Water Resources & Ocean Engineering,
NITK Surathkal – 575025
Ph: 0824-2474000 Extn: 3313
(M): 9972797225
Email I'd: pruthviu@nitk.edu.in

**Sd/-
Coordinator**

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

Terms and Conditions

1. The rates should be quoted for preferably FOR destination from supply within India.
2. **In case, Goods are to be Imported, the Indian agent should furnish authorisation certificate by the principles abroad for submission of the bid in response to this Notice Inviting Tender.** In case of import both CIF and/ or FOB rate should be quoted. All components of expenditure to arrive at Bangalore need to be explicitly specified.
- 3 The bidder shall indicate the excise duty exemption for the goods if applicable.
- 3 The institute is eligible for customs duty exemption, excise duty exemption, issuance of form D.
4. The rate quoted should be on unit basis. Taxes and other charges should be quoted separately, considering exemptions if any.
5. Rate quoted should be inclusive of Testing, commissioning and Installation of equipment and Training.
6. 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.
In case of Imports, the payment will be made through LC / Sight Draft / After Installation, and performance security need to be submitted at the time of LC commitment / issue of sight draft.
7. Guarantee and Warrantee period should be specified for the complete period conforming to the section 3 of this tender document.
8. Period requirement for the supply and installation of item should be specified conforming to the section 3 of this tender document.
9. In case of dispute, the matter will be subject to Mangalore Jurisdiction only.

SCHEDULE OF REQUIREMENTS, SPECIFICATIONS AND ALLIED DETAILS

[To be filled up by the Department / Centre of NITK, Surathkal]

Item(s) Name to be Procured : Outboard Electric Motor Kit

Brief Specifications of the Item(s)
(Attach Additional Sheet if necessary) : Attached

Quantity : 1 Kit

Any other details / requirement : Nil

Warranty Period required : Two years

Delivery Schedule expected
after placement of Purchase order
(in Weeks) : 45 days

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

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

Detailed Technical Specifications

Specifications for Outboard Electric Motor Kit

Outboard electric motor kit:

The kit consists of two units: **Unit A** Outboard electric motor with battery and **Unit B** Motor mounting brackets

Unit A: outboard electric motor with battery unit

Outboard electric motor should have a minimum of 180W Propulsive power (equivalent to 1HP propulsive power and 2 HP thrust of petrol outboards). Static thrust of the system should be minimum of 13 kg (higher is preferable) at a maximum propeller speed of 1200 rpm. Shaft length should be minimum 400 mm. total weight of the system should be below 10 kg (including battery).

High performance lithium battery unit of minimum 300Wh capacity (Higher is preferable) and it should be detachable from the motor unit. Total weight of the battery unit should be less than 4kg. The kit must include a battery charger.

Provisions for manual multiple step trimming and tilting with ground protection should be there.

Both forward and reverse drive systems should be there.

The system must have display on throttle which provides information about Battery Status, Range, Speed and Input power.

The unit should be Waterproof (IP67 minimum requirement)

Features like emergency kill switch, battery charge indicator, integrated onboard computer with GPS and wireless tracking through smartphones are essential.

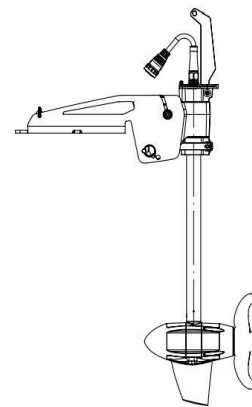


Fig1: Schematic Diagram of outboard electric motor assembled

Unit B: Motor mounting bracket

Easily attachable (to both **Unit A** and light boat)
mounting brackets are required
all the necessary mounting fixtures and guide strings
must be included in the unit.
Mounting brackets should be suitable for Marine
Vehicles such as light boa (as shown in the figure 3)

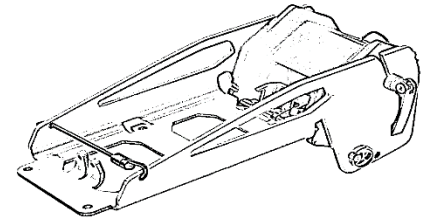


Fig 2: Schematic
Diagram of motor mount

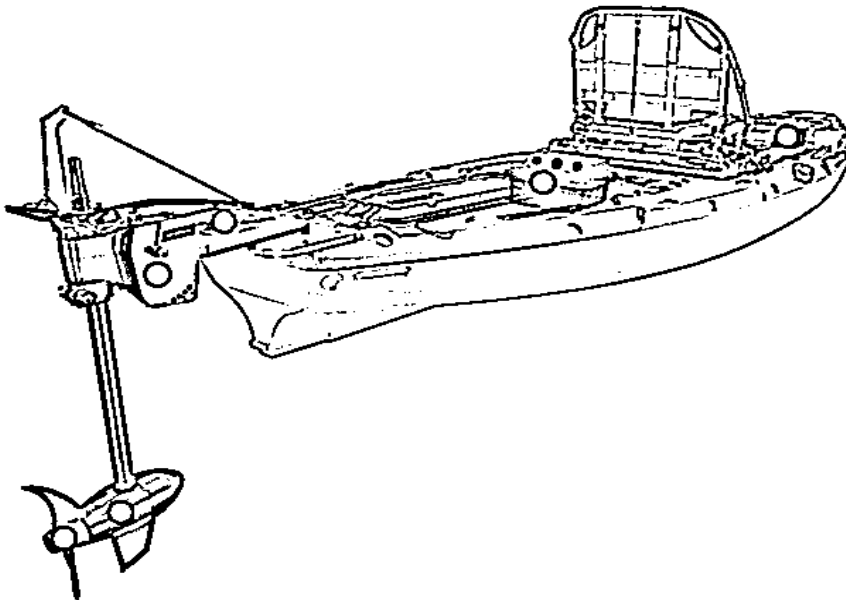


Fig 3: Schematic Diagram of final assembly: (Boat is not included in the quotation)

Additional Mandatory Requirements:

1. General warranty is for 2 years from the date of Delivery and Installation, which is the minimum.
2. Companies have to ensure equipment lands at NITK