

DEPARTMENT OF MECHANICAL ENGG.
INDIRA GANDHI INSTITUTE OF TECHNOLOGY
SARANG-759146, DIST: Dhenkanal, Odisha

Ref. No. IGIT/ Mech/929

Date: 29.12.2025

Call for Spot Quotation

Dear Sir,

Sealed spot quotations in company letter head are invited from Original Equipment Manufacturer / Authorized Distributor / Authorized Dealer / Supplier for the articles and/or for integration into an ROV intended for underwater imaging, video capture, and turbidity measurement (including determination of the ROV's depth/height and position at a dam mentioned below terms and conditions and Annexure- II.

Quotation received after the due date, or without seal shall not be considered. The materials will have to be delivered within 2 months from the date of placing order unless otherwise directed failing which the purchase order is liable to be cancelled.

Late Applications: Any application, received after the last date and time i.e., **12.01.2026 (4.30 PM)** for submission, shall not be accepted. Applications received after the last date shall be summarily rejected and returned unopened.

The completed application (response document), (printed, signed and bound copy) shall be submitted in a sealed cover superscribed with the title "Supply, Installation and integration into an ROV of the project" at the address given below (by registered/speed post only / Indian Postal Services only):

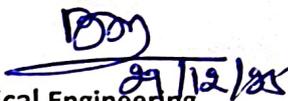
To

The HOD, Mechanical Engineering.

Indira Gandhi Institute of Technology, Sarang Dhenkanal-759146, Odisha, India.

Photocopy of valid authorization certificate, PAN/TIN card and GST registration are also required to be enclosed. The terms of delivery along with any extra charges e.g. GST etc. & mode of payment should be indicated clearly in the quotation. Payment shall be made after successful installation. The material will be delivered to IGIT Sarang on FOR basis. The bidder should submit the manuals with the quotation.

Yours faithfully,


HOD, Mechanical Engineering.
Sarang
IGIT SARANG
Professor & Head,
Department of Mechanical Engineering,
Indira Gandhi Institute of Technology
Sarang, Dhenkanal- 759146 (Odisha)

TERMS & CONDITIONS

- i. In case, after Pre-bid meeting (wherever applicable) any modification(s) / addition(s) / deletion(s) or any alternation in the requirement(s) etc. is required, the same will be placed on the IGIT website-www.igitsarang.ac.in, therefore, all the bidders are advised to visit our website before filling / submitted their Quotations.
- ii. The Call for Spot Quotation is invited for the assembly, integration, and testing of an underwater Remotely Operated Vehicle (ROV) using the components **already available in the laboratory (Annexure- I) and additional components to be supplied/recommended by the vendor, including a turbidity meter, underwater camera, and LED lighting system for underwater imaging and videography (Annexure- II).** After getting workorder, PI will send the equipment to the vendor, listed in Annexure-I as per the requirements.
- iii. Vendors are requested to provide their technical expertise for the design and fabrication of a robust mechanical frame and housing to accommodate the available components, integration of a suitable sensors module along with underwater imaging equipment, and comprehensive guidance and support for power management, waterproofing, and control systems to ensure reliable, stable, and safe underwater operation of the ROV. The detailed list of components presently available in our laboratory is enclosed under Point xiii.
- iv. The offered rates will be valid initially for a period of one year. The Institute can place repeat order on same terms & conditions within this period.
- v. Acceptance of Quotation will be intimated to the successful Firm through a Letter of Intent (LOI) duly signed by the authorized signatory of the institution.
- vi. This Quotation is valid up to 180 days from the issue of quotation notification.
- vii. IGIT's officials can review the progress of work and can instruct regarding quality aspect.
- viii. The rates quoted by the bidder should be a complete package of training programme inclusive of all applicable tax, duty(ies), transportation to IGIT, Sarang and nothing extra / additional shall be payable on these rates.
- ix. Conditional Quotation will not be accepted.

- x. Successful bidder will be required to submit schedule of activities to complete the work order (day wise/Date wise) with technical bid document.
- xi. The authority reserves the right to accept or cancel any or all Quotations without assigning any reason there-of.
- xii. The bidder may add the purchase order received from any organization in this aspect.
- xiii. List of the components available in our laboratory ,

Annexure- I

Sl. No.	Name of the equipment/setup/device	Specification / Description	Quantity
1.	ET02A - Underwater Thruster with ESC-combo for forward direction	2kgf bi-combo (Clockwise Propeller)	1
2.	ET02A - Underwater Thruster with ESC-combo for up direction	2kgf bi-combo (Clockwise Propeller)	1
3.	ET02A - Underwater Thruster with ESC-combo for Backward direction	2kgf bi-combo (Counter clockwise propeller)	1
4.	ET02A - Underwater Thruster with ESC-combo for movement of left direction	2kgf bi-combo (Clockwise propeller)	1
5.	ET02A - Underwater Thruster with ESC-combo for movement of right direction	2kgf bi-combo (Counter clockwise propeller)	1
6.	ET02A - Underwater Thruster with ESC-combo for down direction	2kgf bi-combo (Counter clockwise propeller)	1
7.	Li-Po Battery pack	13000mah (3S)	1
8.	Terminal Board		1
9.	Battery connector	XT90 M-F	2
10.	Servo tester	4.8V to 6V DC: 500-2500 μ s Frequency: 50 Hz or adj.	6
11.	Battery Charger	HTRC C240 DUO AC 100-240V DC 11-18 V LiPo LiFe / Li-ion/NiCd /Ni MH /Pb Multi Charger/Discharger	1
12.	Jumper wire	Male-male,male-female,female - female	40
13.	Terminal Board	12 channel	1

Summary required function of ROV

Standard inspection-class underwater Remotely Operated Vehicle (ROV) designed for general-purpose underwater observation, monitoring, and inspection tasks. The system is engineered with an industrial-grade control and data acquisition architecture, providing reliable performance for extended underwater operations across a wide range of applications. Industrial control and data acquisition system, tether cable with management system, power supply/charger, user documentation, and basic operational guidance during handover.

General Specifications

1. Operating Environment Freshwater / Controlled aquatic environments
2. Depth Rating 50–100 meters (configuration dependent)
3. Operation Mode Tethered, surface-controlled
4. Operating Temperature -10°C to +45°C

Annexure- II

Sl No	Description of items	Unit	Specification / Description	Base Price	GST	Price including GST
1.	Frame Material	1	HDPE with stainless steel reinforcements			
2.	Electronics Enclosure	1	Acrylic pressure tube with aluminum end caps			
3.	Construction	1	Corrosion-resistant modular design			
4.	Propulsion System	1	Thruster Configuration 6-vector layout (surge, yaw, heave)			
5.	Thrusters	NA	Customer-supplied brushless underwater thrusters from Annexure-I			
6.	Camera	1	Resolution Full HD 1080p			
7.	Lighting	4	High-intensity LED (Total 8800 lumens)			
8.	Sensor Type	1	Low-light CMOS			
9.	Field of View	NA	150° wide-angle			

10.	Camera Tilt	NA	Motorized, 120° vertical			
11.	Depth / Pressure Sensor	1	Rated for 100 m, real-time depth display			
12.	IMU	1	Gyroscope & Accelerometer			
13.	Compass	1	Inbuilt digital compass			
14.	Temperature Sensor	1	Water temperature monitoring			
15.	Current Sensor	1	Electrical load monitoring			
16.	Leak Detection	1	Water ingress alert system			
17.	Control Architecture	1	Industrial-grade data acquisition system			
18.	Signal Interface	1	Wired communication via tether			
19.	Control Interface	1	Industrial joystick / control panel			
20.	Software	1	Industrial / open-source compatible control software			
21.	Display	1	Industrial PC / Laptop for live video & telemetry			

Key Features & Advantages

- Standard inspection-class ROV platform
- Depth-rated up to 100 m (configuration dependent)
- Industrial-grade control and data acquisition architecture
- Modular design compatible with customer-supplied propulsion
- Reliable and scalable underwater inspection solution

SIGNATURE OF QUOTATIONER WITH SEAL AND DATE