

राजीव गांधी पेट्रोलियम प्रौद्योगिकी संस्थान (आरजीआईपीटी)

Rajiv Gandhi Institute of Petroleum Technology
(संसद के अधिनियम के अधीन स्थापित राष्ट्रीय महत्व का एक संस्थान)
(An Institute of National Importance established under the Act of Parliament)
जायस, अमेठी- 229304, उत्तर प्रदेश Jais, Amethi- 229304 Uttar Pradesh

QUOTATION ENQUIRY for Laser Displacement Sensor

Ref. No.: RGIPT/JAIS/SEM/LOS/R2/2024-25

Dated: 23-12-2024

Last Date and time for the quote: 6-01-2025 till 17:00 hours in the Office of the Department of Department of Science & Humanities, 5th Floor, AB-2, RGIPT, Jais, UP-229304.

Dear Sir/Madam,

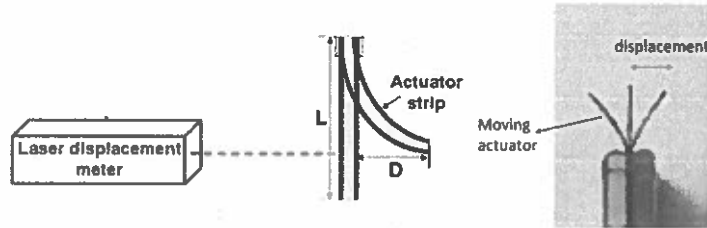
Please submit your lowest quotation for supplying the under mentioned item. Quotation must reach us before the date marked above and should contain the following information:

1. Clearly mention the date of validity of offer.
2. **Kindly clearly mention your E-mail ID and Mobile number.**
3. Kindly mention appropriate GST % as applicable for supplying of Goods & Services.
4. Please mention your GST registration number and PAN in the quotation.
5. Conditions of supply and terms of payment shall be clearly mentioned in the quotation.
6. **TECHNICAL AND FINANCIAL BID DOCUMENTS SHOULD BE SUBMITTED IN SEPARATE ENVELOPES.**

Quotation must be sent in **sealed envelope** with word **"QUOTATION for "Laser Displacement Sensor"** and addressed to Office of the **Department of Department of Science & Humanities, 5th Floor, AB-2, RGIPT, Jais, UP-229304**. Our reference number and last date as given above should be clearly marked over it.

A laser displacement sensor capable of measuring distance/displacement is required. A laser displacement sensor will be used to measure the displacement of the actuator strip as shown in the schematic below. The strip is a polymer material with metal electrodes (electrode material can be transparent, translucent and opaque) coated on it.

Technical specifications and related accessories are given in Table 1.



Required Technical Specifications and features of Laser Displacement sensor	
Parameter	Specifications
MEASURING RANGE	500 MM AND HAVE OFFSET OF MINIMUM 100 MM or MORE
MEASURING RATE	0.2 KHZ TO 10 KHZ SELECTABLE FROM THE SOFTWARE
LINEARITY	+/- 400 MICRONS or +/- 0.08% OF FSO OR BETTER
REPEATABILITY	< 20 MICRON OR LESSER
TEMPRATURE STABILITY	+/- 0.005 % Full Scale Output/K
LIGHT SPOT DIAMETER	950 × 1200 MICRONS OR LESSER

LASER CLASS	LASER CLASS 2 OR BETTER (should NOT AFFECT HUMAN BODY)
SUPPLY VOLTAGE	11 TO 30 V DC ONLY
POWER CONSUMPTION	< 3W OR LESSER
SIGNAL INPUT	1XHTL/TTL, MASTERING, ZEROING, TRIGGERING (SOFTWARE / HARDWARE BOTH SELECTABLE)
DIGITAL INTERFACE	RS422 (18BIT)/PROFINET / ETHERNET IP
ANALOG OUTPUT	4-20MA/ 5V/10V 16BIT.
CONNECTIONS	INTEGRATED CABLE 3M, BENDING RADIUS 30MM
TEMPERATURE RANGE	0 TO 50 DEGREE
SHOCK	15g/6 ms in 3 axes OR BETTER
VIBRATIONS	30G/20 OR BETTER
MATERIAL	ALUMINIUM HOUSING (RUGGED) AND MUST BE SMALLER IN DIMENSIONS (NOT MORE THAN 100 × 50) AND LESS WEIGHT
DATA RECORDING	DATA RECORDING FROM THE SENSOR SHOULD BE IN EXCEL FORMAT. AND SENSORS MUST SUPPORT WEB BROWSING FOR THE EASY EXCESSIBILITY.
SPECIAL FEATURES	MUST HAVE WEB INTERFACE ALONG WITH ADVANCED SURFACE COMPENSATION AND AMBIENT LIGHT COMPENSATION UP TO 50,000 LUX OR MORE.
PROTECTION CLASS	IP67
POWER SOURCES	A DC SOURCE MUST BE SUPPLIED WITH THE SAME HAVING 24VDC (16 TO 30VDC). OUTPUT AND INPUT ARE SINGLE PHASE 220VAC.
SOFTWARE	Necessary Software (Perpetual Type) To Record Data And Analyze The Data with required accessories
INSTALLATION	INSTALLATION will be done by OEM/Supplier/Bidder.
TRAINING AND DOCUMENTS	TRAINING AT OUR END ALONG WITH THE CALIBRATION CERTIFICATE OF SENSOR REQUIRED
Warranty	1 years from the date of installation.
*QCBS evaluation methodology will be adopted for technical and financial evaluation.	
For any query: Dr. Vipin Amoli Assistant Professor, Department of Science & Humanities RGIPT, Jais, Amethi-229304, U.P. Mobile: 8755872983 vamoli@rgipt.ac.in	

Atul Sharma
23rd Dec 20

Prof. Atul Sharma,
Head Department of Sciences and Humanities
RGIPT, Jais, Amethi