



**Request for quote and specifications for Continuous Tunable Laser**

- Quantum Research Park (QuRP) at FSID- Foundation for Science Innovation and Development is seeking bids from qualified industries for the procurement of Continuous Tunable Laser. The specifications for these consumables are listed on Page 2.
- Companies need to submit two bids, a technical bid, and a commercial bid, in two separate sealed envelopes. The bids should be submitted no later than 21 days from the date of posting of this tender, as listed on the website date/time stamp, and by 5 p.m. on the 21st day or the next weekday in case the 21st day falls on a weekend or a national holiday.
- Both technical and commercial bids should be addressed to “The Chief Executive, FSID, IISc, Bangalore-560012.”
- The envelopes should be addressed to “Prof. Akshay Naik, CeNSE, IISc, Bangalore, 560012” and submitted to the office at Cense, IISc in Room No. GF 15 between 9 am and 5 pm.
- All questions regarding this tender should be addressed to Prof. Akshay Naik at the email address [anaik@iisc.ac.in](mailto:anaik@iisc.ac.in) with CC to [office.qurp@iisc.ac.in](mailto:office.qurp@iisc.ac.in)
- Post such submission all vendors should send an email to [anaik@iisc.ac.in](mailto:anaik@iisc.ac.in) with CC to [office.qurp@iisc.ac.in](mailto:office.qurp@iisc.ac.in) with the subject line “QuRP\_Bidder’s name\_Tool Name” to inform him of the submission within one day.
- Deviations from the technical specifications requested are allowed. Such deviations must be highlighted and justified. Their acceptance or rejection will be left to the discretion of the technical committee.
- The equipment will be used at the Centre for Nano Science and Engineering (CeNSE), Indian Institute of Science (IISc). IISc is India’s No. 1 institution of higher learning, and the Centre for Nano Science and Engineering is home to one of the best academic fabs in the world.
- The technical response, corresponding to the tool being offered, should be in the form of a compliance table with at least 5 columns. Serial number in column 1. Each of the numbered technical items below should be addressed in a separate row of the table in column 2. Compliance with this requirement, in Yes/No, deviation from it, and justification should be provided in the neighboring columns 3-5. Post the opening of a hard copy of the technical bid the committee will request for a soft copy of the files for further processing. Companies should NOT mail soft copies of the files unless specifically requested.
- Detailed technical specifications of the Continuous Tunable Laser being offered should be included.
- Any additional capabilities or technical details, that you would like to bring to the attention of the purchase committee, can be listed at the end of the technical table.
- Vendors are encouraged to highlight the advantages of their lasers over the competitors.
- The commercial bid should be broken up to the maximum extent possible into separate items with a cost against each to enable better comparison of price for various configurations. Vendors are encouraged to quote for as many add-ons as their portfolio permits.
- The complete system is to be under warranty period of a minimum 3 years (year wise breakup value should be shown in the commercial bid) including free supply of consumables, spare parts and data analysis software from the date of functional installation. If the instrument is found to be defective, it has to be replaced or rectified at the cost of the bidder within 30 days from the date of receipt of written communications from IISc, Bangalore. If there is any delay in replacement or rectification, the warranty period should be correspondingly extended.

**Technical Specifications of the Continuous Tunable Laser Source**

Sl.No.	Technical specifications	Compliance with this requirement		Justification
		Yes	No	
1	Laser type: Continuously tunable laser (fiber output)			
2	Interface: APC			
3	Wavelength tuning range: 1550-1630 nm			
4	Wavelength resolution $\pm 1$ pm or better			
5	Wavelength repeatability $\pm 1$ pm or better			
6	Mode Hop free fine-tuning range: $> (30 \text{ GHz})260$ pm			
7	Mode Hop free tuning range: $>50$ nm			
8	Tuning Speed: 20 nm/s or better			
9	Fiber-coupled output power @1600 nm $>10$ dBm			
10	Power repeatability $\pm 0.01$ dB or better			
11	Power stability $\pm 0.01$ dB or better			
12	Linewidth $\leq 100$ kHz			
13	Fine-Frequency Modulation Bandwidth $<2$ kHz			
14	Max Current Modulation Bandwidth $<1$ MHz			
15	Intensity modulation $<200$ KHz (internal drive)			
16	Polarisation Extinction Ratio: $>100:1$ ;			
17	Side-mode suppression ratio $> 40$ dB;			
18	Back reflection $< -14$ dB			
19	Relative intensity noise $< -140$ dB/Hz at 10 MHz			
20	Wavelength stability $\pm 10$ pm per hour			
21	Internal power monitor with accuracy $\pm 0.05$ dBm			
22	Computer interface through USB/Ethernet for programmable control			



**Terms and conditions:**

1. Vendors can quote for the above technical specifications.
2. Shipping: On all the items the cost of shipping up to IISc. IISc will help the shipping company to take care of the customs clearance at Bangalore Airport. Please include your payment option.
3. Training and demonstration of the equipment are essential.
4. References: Bidders should provide details of other locations/users across the globe where similar material was delivered.
5. The lead time for the delivery of the material should preferably be less than 4 weeks from the date of receipt of our purchase order. The smallest lead time will be appreciated. Otherwise, the lead time should be specified.
6. The validity period of the quotation should be 90 days at least.