To whom it may concern

This is a **Request for quote (RFQ) from domestic (India-based) manufacturers only** for procurement of a Tunable Mid-Infrared Laser System at the department of Electrical Communication Engineering (ECE), Indian Institute of Science, Bangalore.

All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below. Quotation should come only from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor. The quotations should be on FOR-IISc Bangalore basis in INR only.

With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed. As per this order, the government has defined a 'Class-I local supplier' as "a supplier or service provider whose goods, services or work offered for procurement, has local content equal to or more than 50%". A 'Class-II local supplier' is "a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%". Only Class-I and Class-II local suppliers are eligible to participate in this open domestic tender. Any "Non-local supplier" i.e. "a supplier or service provider, whose goods, services or works offered for procurement, has local content less than 20%" is ineligible to participate in this tender.

The deadline for submission of proposals is **20th June 2023 by 5:00 PM.** Proposals should arrive at the office of **Dr. Varun Raghunathan, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, Karnataka 560012, India.**

Direct all questions concerning the acquisition to **Dr. Varun Raghunathan** at: **varunr@iisc.ac.in .**

General Terms and Conditions:

1. The bid should be submitted in the two-cover system, i.e. technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, except the price.
2. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If "no" the second column should state the extent of deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
3. In the commercial bid, the price should be inclusive of all discounts.
4. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
5. The covering letter should clearly state the whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.
6. The vendor to state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.

7. The lead time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
8. All the quotations must be valid for at least 90 days at the time of submission.
9. List of customers and references: The Bidder should have supplied similar equipment in Central Universities preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT) . Please provide the details and contact information.
10. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
11. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.
12. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
13. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
14. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
15. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.
16. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
17. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
18. Please quote the price of each optional line item, separately.

Technical requirements:

Please note that the requirements and options listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason for disqualification. They will be discussed by the technical committee prior to making an informed decision.

Technical Specifications	Values/ Range
Center Wavelength	6 micron
Wavelength tuning range	5.1 to 6.9 micron
Operating mode (CW or pulsed)	Pulsed mode
Pulse repetition rate	100 Hz - 3 MHz (user programmable)
Pulse width	40 nsec to 1 μs (user programmable)
Pulse duty cycle	1-10 % (user programmable)
Output power	20 mW (minimum) average power Settings to achieve the above power to be specified.
Tuning step size	0.1 cm^{-1}
Wavelength accuracy	< 1 cm^{-1}
Wavelength repeatability	< 0.1 cm^{-1}
Tuning modes	Single step, programmable multi-step and continuous sweep
Tuning speed	10 cm^{-1} step in <5 msec Linear sweep > 10000 cm^{-1}/sec
Pulse Stability	<2% peak-to-peak - specify time duration
Beam quality	TEM00, ellipticity < 1.5:1
Beam size	To be specified - provide measured beam profiles
Polarization	Linear, > 100:1
Beam pointing accuracy	< 2 milli-radian
Triggering option	External via TTL out Trigger based wavelength tuning
Control interface	USB 2.0 or better
Spectral imaging software	To be included
Cables, Connectors etc.	To be included
SDKs	To be included
Operating temperature	10-30^{o}C
Operating humidity range	0-60% RH
Power requirement	100-240 VAC - 50/60Hz, < 5 A
Cooling Requirement	Built-in air cooling
Laser Eye Safety	Laser class and safety requirements to be specified

Other requirements:	
1.	Laser tuning curves with measured power (average or peak) and pulse parameters used to be included
2.	Tuning step-size, accuracy and linear sweep data to be included
3.	Laser beam profile and pointing data to be included across multiple wavelengths in the tuning curve
4.	Supplier should agree to provide Performance test reports prior to dispatch of goods
5.	Compatible operating system(s) for the interface software should be specified. Suitable software drivers available should be specified
6.	Please include other options currently available which can be added on in the future
7.	The cost of shipping to IISc should be included.
8.	List of acceptance tests for on-site (vendor) inspection and after installation at IISc
9.	A set of basic experiments for performing routine checks of acceptable operation with clear instructions to be provided
10.	The payment terms will be specified in the commercial proposal and is subject to negotiations
11.	Please provide details of the number of trained personnel in India, number in southern region or in Bangalore who can service the instrument
12.	Service credentials: The supplier should have at least five similar installation in India. Customer list with contact details mandatory to prove your credential
13.	Authorisation letter from OEM manufacturer to be included
14.	Vendor must provide complete compliance statement against each technical point.

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