# Request for quote (RFQ) from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor

### Summary

1.	Tender Number	IAP/CMC/20-21/04
2.	Tender Date	02 August 2021
3.	Item Description	100 mW cw diode laser system @405 nm and linewidth < 5 MHz along with fully digital ultra-low-noise laser driver system
4.	Tender Type	Two bid system:
		(a) Technical Bid (Part A)
		(b) Commercial Bid (Part B)
5.	Place of tender submission	Dr. C. M. Chandrashekar
		Department of Instrumentation and Applied Physics,
		Indian Institute of Sciences,
		Bengaluru 560012
6.	Last Date & Time for submission of tender	17 <sup>th</sup> August 2021, 5:00 PM

#### To whom it may concern

This is a Request For Quote (RFQ) from Indian Original Equipment Manufacturer (OEM) or their Indian authorized distributor only for procurement of 100 mW cw diode laser and control @405 nm with linewidth < 5 MHz and Ultra-low-noise laser driver with full digital control and associated software at the department of Instrumentation and Applied Physics (IAP), 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.

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 4<sup>th</sup> June 2020 will be followed. As per the 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 17<sup>th</sup> August 2021 by 5:00 PM. Proposals should arrive at the office of Dr. C. M. Chandrashekar, Department of Instrumentation and Applied Physics, Indian Institute of Science, Bangalore, Karnataka 560012, India.

Direct all questions concerning the acquisition to addresses of **Dr. C. M. Chandrashekar** at: <a href="mailto:chandracm@iisc.ac.in">chandracm@iisc.ac.in</a> or **Dr. M. Shafi** at: muhammeds@iisc.ac.in

#### **General Terms and Conditions**

- 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 quotations should be on FOR-IISc Bangalore basis in INR only. Since IISc is DSIR registered organization, hence it is eligible for GST rate @5% as the equipment is required for research purposes only.
- 5. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
- 6. The covering letter should clearly state that whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.
- 7. 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.
- 8. 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.
- 9. All the quotations must be valid for at least 90 days at the time of submission.
- 10.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.
- 11. 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.
- 12. 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.
- 13. Vendors are encouraged to highlight the advantage of their tools over comparable tools from the competitors.
- 14.If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
- 15. 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.
- 16. 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.
- 17. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.
- 18.After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.
- 19. Please quote the price of each optional line item, separately.

**Technical requirements:** Please note that the requirements 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.

# 100 mW cw diode laser system with full digital **ultra-low-noise laser driver** system

SI. No.	Technical Specification	Value / Range
1.	Power	100 mW mode-hop-free laser emission
2.	Central Wavelength	405 nm +/- 2 nm. Single frequency
3.	Line width	< 5 MHz
4.	Coherence Length	> 25 m with active coherence stabilization
5.	Wavelength stability	< 1 pm/h (< 0.5 pm/h typ.)
6.	Power stability	< 0.5% (STD/mean)/h typ.
7.	Intensity noise	< 0.1% @ 10 Hz 10 MHz
8.	Linear polarization	> 100:1, 90°
9.	Laser head dimension	Approx. 192 x 80 x 60 mm <sup>3</sup>
10.	Beam diameter	1 mm (FWHM) in the far field, 2 m from laser head
11.	Beam type and profile	Collimated, circular beam and M <sup>2</sup> < 1.5 (< 1.2 typ.)
12.	Feedback protection	Built-in feedback protection (30 dB optical isolator) and
		beam shaping
13.	Driver Unit	Compatible driver unit specifications:  (a) Microprocessor type driver unit (b) Ultra-low-noise laser driver with full digital control (c) Should power 1 or 2 laser heads (d) Should have PC control or push button operation (e) Auto-detection of laser head and operating parameters (f) In-build temperature control (g) Digital communication interface: USB / ethernet
14.	Software /graphic interface to control	Must be included with graphic interface capabilities
15.	Any cables, connectors or other accessories required to connect laser system with laser driver system and to PC.	Must be included
16.	Warranty	Minimum of one year

## Other requirements:

1.	Compatible operating system(s) for the interface software should be specified.				
	Suitable software drivers available should be specified.				
2.	Please include other options currently available which can be added on in the future.				
3.	Training and installation: Different options for training and installation by service				
	engineer to be listed and quoted.				
4.	The cost of shipping to IISc should be included.				
5.	List of acceptance tests for on-site (vendor) inspection and after installation at IISc.				
6.	A set of basic experiments for performing routine checks of acceptable operation				
	with clear instructions to be provided.				
7.	The payment terms will be specified in the commercial proposal and is subject to				
	negotiations.				
8.	Please provide details of the number of trained personnel in India, number in				
	southern region or in Bangalore who can service the instrument.				

Dr. C. M. Chandrashekar Instrumentation and Applied Physics Indian Institute of Science Bangalore, Karnataka 560012 chandracm@iisc.ac.in