Akshay Singh Assistant Professor Department of Physics Indian Institute of Science Bangalore 560 012, INDIA



Request for quotation (RFQ) from Indian OEM or its authorized Indian Distributor for the procurement of a femtosecond optical parametric oscillator (OPO) laser unit (Last Date for submission of tenders: 7th September'2023)

REF: PH/ASIN/001/2023-24

16th August'2023

A request for quotation from Indian OEM or its authorized Indian distributor for an optical parametric oscillator (OPO) on **FOR Bangalore basis with value quoted in INR**. The quotation should clearly indicate the terms of delivery, delivery schedule, E.D., transportation charges, if any, payment terms etc. Kindly submit the quotation latest by 7th September'2023 to Department of Physics, IISc.

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 of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 04th June 2020, will be followed. Per this order, the government has defined a 'Class-I local supplier' as "a supplier or service provider, whose goods, services or works 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.

Please enclose a compliance certificate along with the bid. This certificate should have a table that should describe your compliance in a "Yes" or "No" response against each of the items in the specifications listed below. If "No", the second column should state the extent of deviation. The third column should state the reasons for the deviation if any. Please enclose a compliance statement along with the technical bid. Bids with no statement of compliance will be considered invalid, and will be disqualified.

Specifications of Item: one-box, widely tunable, femtosecond optical parametric oscillator (OPO) laser unit with the following specifications:

- 1. Compatible with Mai-Tai HP as the seed/fundamental laser for synchronous pumping. The repetition rate should be close to 80 MHz.
- 2. Four independent outputs signal, idler, depleted fundamental, Second Harmonic Generation (SHG), with 2-3 outputs accessible at any time.
- 3. Pulse-width: 100-250 fs (at 800 nm).
- 4. Second harmonic generation (SHG) unit integrated inside laser unit.
- 5. Gap free tuning range: 490-750 nm (signal), 930-2500 nm (idler), 350-500 nm (SHG), 690-1040 nm (depleted fundamental). Larger tuning range is also acceptable.
- 6. Power: > 0.3W (at 500 nm for signal), > 0.15W (at 1200 nm for idler), > 1W (at 400 nm for SHG), >1.1W (at 800nm for depleted fundamental)
- 7. Completely automated tuning of wavelengths using computer control, along with automated cavity alignment to maintain optimal power.
- 8. Integrated visible range spectrometer for monitoring laser spectrum.
- 9. On-demand ability of controller to stabilize wavelength or power.
- 10. Spatial mode TEM00, with $M^2 < 1.2$ or lower.
- 11. Wavelength stability < 0.5 nm.
- 12. Polarization- 100:1 or better.
- 13. Output power noise < 1% RMS.
- 14. All appropriate air/water cooling units for laser should be included.



- 15. Appropriate computer software should be included. Additionally, Lab-View compatibility and appropriate sub-VI files should be provided.
- 16. Operating voltage: 220 VAC, 50Hz.
- 17. Related components such as necessary software, connectors, adapters, cables etc. necessary for independent operation of the laser should be included.
- 18. Installation should be performed on site. The installation engineer should also train at least one student.
- 19. Warranty ≥ 1 year from date of installation.
- 20. The vendor should have a track record of having supplied 10 similar equipment (femtosecond oscillator laser units) in India in the last five years (please furnish the details). It would be desirable to provide 2-3 reference letters from customers in India/abroad.
- 21. Please include pictures of the exact model being offered.

Options (please quote separately):

- 1. Additional 1-year warranty (for a total of two years). Clear coverage scope to be mentioned.
- 2. Additional 2-year warranty (for a total of three years). Clear coverage scope to be mentioned.
- 3. Yearly annual maintenance contract (AMC). Clear coverage scope to be mentioned.

Terms and conditions:

- 1. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).
- 2. Quote to be from Indian OEM or its authorized Indian Distributor and in commercial terms quote should be FOR-IISc Bangalore basis in INR.
- 3. The payment will be through "net 30 days after delivery and installation", as per IISc rules.
- 4. The lead time for the delivery of the equipment should not be more than 4-5 months from the date of receipt of our purchase order.
- 5. The offer shall be valid at-least 60 days from the date of opening of the bid.
- 6. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.
- 7. The covering letter in the bid should clearly mention whether the vendor is a 'Class I' local supplier or a 'Class II' local supplier, failing which the vendor will be automatically disqualified. The vendor should indicate the percentage of the local content and provide self-certification that the items offered meet the minimum local content requirement. They should also give details of the location(s) at which the local value addition was made. 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.
- 8. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.
- 9. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.
- 10.MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

Yours Sincerely,

Apply.

Akshay Singh C2-03, Department of Physics, Indian Institute of Science Bangalore 560 012, INDIA Phone: +91 98701-27569 ; email: aksy@iisc.ac.in