



Global tender for the procurement of an “Ultrashort Pulse Laser”

This is a notice inviting global tenders for the procurement of an “**Ultrashort Pulse Laser**” that will be utilized for photonic research at IISc Bangalore. The required technical details including terms and conditions are provided below. The last date of reaching the quotation to us [by post or in-person] is mentioned below.

Bid Schedule

1	Tender No	Ref: PPH/SBM/597/2025-26
2	Tender Date	21 November 2025
3	Item Description	Procurement of an Ultrashort Pulse Laser
4	Tender Type	Two bid system • Technical Bid (Part A) • Commercial Bid (Part B)
5	Place of tender submission	Department of Physics, Indian Institute of Science, Bangalore 560012
6	Last Date & Time for submission of tender	15 December 2025
7	For further clarification	Department of Physics Indian Institute of Science Bangalore – 560012, India. Email: mukherjee[at]iisc.ac.in

Specifications:

1. A tabletop, Ytterbium-based, compact, software-controlled femtosecond laser system is required for continuous 24/7 operation.
2. Pulse width and chirping: Pulse width (FWHM) should be factory set at < 320 femtosecond (fs). Pulse width should be tunable at least up to 10 ps by software. The pulse chirping should be optimized in the range of *positive* ≥ 5 ps of up-chirp to *negative* ≥ 10 ps down-chirp. Provide autocorrelation data along with the technical bid.
3. Central wavelength: 1030 ± 10 nm. The laser pulses should be close to bandwidth-limited at the factory set pulse width. Provide wavelength spectrum along with the technical bid. The FWHM should be below 8 nm.

4. Pulse repetition rate (PRR): PRR should be tunable by software at least in the range of 1 kHz to ≥ 1 MHz. Laser systems with higher PRR up to 40 MHz are acceptable.
5. Energy per Pulse: ≥ 12 micro-J at 500 kHz PRR and 80 to 100 micro-J from 1 kHz to ≥ 50 kHz PRR range. The measured variation of pulse energy with PRR (a graph or a table) must be provided along with the technical bid.
6. Average power: ≥ 6 W at 500 kHz PRR
7. Temporal pulse shape: Gaussian.
8. Beam shape (cross-section): Gaussian.
9. Beam Quality: $M^2 < 1.2$ on both axes.
10. Beam diameter: 2.1 ± 0.4 mm.
11. Beam ellipticity: > 0.9
12. Power stability: Excellent power stability ($< 0.5\%$ rms over ≥ 24 hours) is required. Provide stability data along with the technical bid.
13. Beam pointing stability: As good as possible, preferred < 20 micro-rad / $^{\circ}$ C. Provide measured data along with the technical bid.
14. Polarization: Linear (vertical preferred), polarization ratio $\geq 1:1000$
15. Operating temperature: At least in the range of 18 to 30 $^{\circ}$ C
16. Cooling: Air-cooled.
17. **SHG output:** An integrated SHG output at 515 nm wavelength with $> 50\%$ conversion efficiency is required. Provide price for the SHG output separately.
18. Mode of operation: Free space output, capable of performing remote diagnosis.
19. Operating voltage, frequency: 220 VAC, 50 Hz.
20. All accessories such as necessary software, connectors, adapters, cables etc. required for the independent operation of the laser should be included.
21. Installation should be performed on site
22. The vendor/company and/or their associate (agent) in India should provide after sales service, full support, and onsite repair if required.
23. Warranty: 1 year [onsite repair is preferred] from the date of installation. Please quote for extending the warranty period for an additional one (i.e., total of two) as well as two (i.e., total of three) years.

24. Integration: The vendor/company should provide a complete factory set integrated system. Testing and documentation must be done using the complete system, assembled, and integrated in the factory.

Terms and conditions:

1. Only the Original Equipment Manufacturer or their authorized representatives shall participate in the bid.
2. The order will be placed only on the bidder who participated in the bid.
3. The bid should be submitted in a 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**.
4. 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 specification. If "no" the second column should mention the extent of the 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. **Tender documents without technical compliance documents will not be considered.**
5. In the commercial bid, the price should be inclusive of all discounts.
6. The vendor/company should have a track record of having previously supplied **at least five similar equipment (i.e., micro-Joule femtosecond pulsed laser near 1030 nm) in India in the past five years** (please furnish the details). It would be desirable to provide two reference letters from customers in India along with the technical bid.
7. It is desired that the vendor/company had supplied similar pulse lasers systems in well-known national/international institutes/universities (please furnish the details, e.g., published articles in reputed international journals [with impact factor > 3] mentioning that a similar product has been used for fs laser-writing of optical waveguides).
8. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.

9. The offer shall be valid at least 90 Days from the date of opening of the commercial bid.
10. The vendor/company should have existence for a minimum of 3 years. (Enclose Company Registration Certificate).
11. The vendor/company must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere.
12. **Delivery, Installation and Training**: Lead time of delivery and installation should be clearly mentioned in the technical and commercial bids. The system should be delivered, installed, and made functional within 9 months from the date of receipt of purchase order. The supply of the items will be considered as effected only on satisfactory installation and inspection of the system and inspection of all the items and features/capabilities tested by the IISc, Bangalore. After successful installation and inspection, the date of taking over of entire system by the IISc, Bangalore shall be taken as the start of the warranty period. No partial shipment is allowed. The bidder should also arrange for technical training to the local facility technologists and users.
13. **Payment Terms**: The quotations should be on C.I.P. Bangalore basis (by Air Freight only). The payments to non-domestic vendors will be made through a Letter of Credit and milestone of the payment will be determined after the mutual discussions with the successful bidder. 100% payments (except AMC) will be released after the completion of delivery and satisfactory installation subject to TDS as per rules. As per GFR, no advance payment can be made to domestic vendors, unless an equal amount of bank guarantee is provided.
14. **Statutory Variation**: Any statutory increase in the taxes and duties subsequent to bidder's offer, if it takes place within the original contractual delivery date, will be borne by IISc, Bangalore subject to the claim being supported by documentary evidence. However, if any decrease takes place the advantage will have to be passed on to IISc, Bangalore.
15. **Dispute and Jurisdiction**: Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Bangalore, India.

16. **Cancellation of Tender:** Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:
- To accept OR reject lowest tender or any other tender or all the tenders.
 - To accept any tender in full or in part.
 - To reject the tender, offer not confirming to the tender terms.
17. 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.
18. Lowest bid will be calculated based on the total price of all items tendered for Basic equipment along with accessories selected for installation, operation, pre-processing and post processing, optional items, recommended spares, warranty, annual maintenance contract.
19. The tender documents can be sent at the following address by post or in-person, and the document should reach us on/before **15 December 2025**.

The Chairman
Department of Physics
Indian Institute of Science,
Bangalore 560012, Karnataka, India
Attention: Seababrata Mukherjee

Annexure-1:

Details of the Bidder

The bidder must provide the following mandatory information and attach supporting documents wherever mentioned.

1. Name of the Bidder
2. Nature of Bidder (Attach attested copy of Certificate of Incorporation/ Partnership Deed)
3. Registration No/ Trade License, (attach attested copy)
4. Registered Office Address
5. Address for communication
6. Contact person- Name and Designation
7. Telephone No
8. Email ID
9. Website
10. PAN No. (attach copy)
11. GST No. (attach copy)

Signature of the Bidder

Print Name

Designation, Seal

Date:

Annexure-2:

Declaration regarding experience

To,
The Chair,
Department of Physics,
Indian Institute of Science,
Bangalore – 560012, India

Ref: Tender No: XXXXXXXXXX
Dated: XXXXX

Supply and installation of an Ultrashort Pulse Laser at Physics, IISc Bangalore

Sir,
I have carefully gone through the Terms & Conditions contained in the above referred tender.
I hereby declare that my company / firm has ---- years of experience in supplying and installing

(Signature of the Bidder)
Print Name
Designation, Seal

Date:

Annexure-3:

Declaration regarding track record

To

The Chair

Department of Physics

Indian Institute of Science

Bangalore – 560012, India

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and installation of an Ultrashort Pulse Laser at Physics, IISc Bangalore

Sir,

I have carefully gone through the Terms & Conditions contained in the above referred tender. I hereby declare that my company/ firm is not currently debarred / blacklisted by any Government / Semi Government organizations / institutions in India or abroad. I further certify that I'm competent officer in my company / firm to make this declaration.

Or

I declare the following Sl.No Country in which the company is Debarred /blacklisted / case is

Pending Blacklisted / debarred by Government / Semi Government/Organizations /Institutions

Reason Since when and for how long

(NOTE: In case the company / firm was blacklisted previously, please provide the details regarding period for which the company / firm was blacklisted and the reason/s for the same).

Yours faithfully

(Signature of the Bidder)

Name

Designation, Seal

Date:

Annexure – 4:

Declaration for acceptance of terms and conditions

To

The Chair

Department of Physics

Indian Institute of Science

Bangalore – 560012, India

Ref: Tender No: XXXXXXXXXX

Dated: XXXXX

Supply and installation of an Ultrashort Pulse Laser at Physics, IISc Bangalore

Sir,

I have carefully gone through the Terms & Conditions as mentioned in the above referred tender document. I declare that all the provisions of this tender document are acceptable to my company. I further certify that I am an authorized signatory of my company and am, therefore, competent to make this declaration.

Yours faithfully,

(Signature of the Bidder)

Name

Designation, Seal

Date:

Annexure – 5

Details of items quoted

Company Name

Product Name

Part / Catalogue number

Product description / main features

Detailed technical specifications

Remarks

Instructions to bidders:

1. Bidder should provide technical specifications of the quoted product/s in detail.
2. Bidder should attach product brochures along with technical bid.
3. Bidders should clearly indicate compliance or non-compliance of the technical specifications provided in the tender document.