

Global Tender Notification for procurement of Optical Fiber processing unit consisting of Specialty Fiber Fusion Splicer and Fiber Recoater with capability of large diameter, polarization maintaining and Photonic Crystal fiber types.

GTE Approval No: IISc-GTE-2023-258

Department of Electrical Communication Engineering (ECE), Indian Institute of Science, Bangalore 560012, India

This is a Request for Quote (RFQ) for procurement of an Optical Fiber processing unit with capability for large diameter and polarization maintaining fibers as part of a limited tender for the Department of Electrical Communication Engineering (ECE) at 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.

The deadline for submission of proposals is **31st July 2023** by 5:00 PM. Proposals should arrive at the office of **Dr. Balaswamy Velpula, Department of Electrical Communication Engineering, Indian Institute of Science, Bangalore, Karnataka 560012, India.**

The bid should be addressed to: **The Chairman, ECE department, Indian Institute of Science, Bangalore 560012, India.**

Direct all questions concerning the acquisition to **Dr. Balaswamy Velpula at: velpulab@iisc.ac.in**

General Terms and Conditions

- 1. Vendors will be required to submit a technical bid and a commercial bid in two separate sealed envelopes.**
2. The technical bid should contain a compliance table with 4 columns in addition to the ones in the technical requirements table that has been included with this RFQ below. The compliance table should include all the items and be in the same order. The first column should describe your compliance in a "Yes" or "No" response. If "No" the second column should state, the extent of deviation. The "third" column should state the reasons

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 requirements 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 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 proposals.
6. All the quotations must be valid for at least 90 days at the time of submission.
7. 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.
8. 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.
9. In the quote vendors are requested to provide itemized costs for all the associated accessories as options.
10. Please provide itemized quotes for the tool and any attachments/packages. Vendors are encouraged to quote for as many packages as their tool portfolio permits.
11. Please provide information regarding the annual maintenance contract (AMC) beyond the warranty period. Please itemize the year wise AMC as options.
12. Warranty terms, duration and additional warranty options are a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.

13. Items in addition to those listed in the technical table that you would like to bring to the attention of the committee can be listed at the end of the compliance table.
14. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.
15. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
16. 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.
17. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.

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 meets 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

The system will comprise primarily of three units – Splicer, cleaver and recoater to handle the large-diameter fibers. The detailed specification requirements are as below

1. Optical Fiber Splicer

- a) Cladding Diameter of fiber handled – 60 μ m to 400 μ m.
- b) Ability to handle PM fibers – Panda, Bowtie and Elliptic core in addition to LMA, SM, MM and PCF, circular, Non-circular, Silica and Soft glass fibers.
- c) End view alignment for splicing.

- d) Software control of Splicer by USB/Serial Port for active splicing
- e) Example splice details.
- f) Splicer translation movement - >12mm.
- g) Appropriate Fiber holders for fiber sizes from 250micron coating to 650micron with end-view feature.
- h) Power supply cables and adaptors for splicer.
- i) Communication cable.
- j) Tool kit for replacement of heating element.
- k) Spare heating elements (Electrodes) - 1 unit for up to 500 μ m diameter optical fibers.**
- l) Splicing test reports/images showing both good and bad quality splices of the different fiber types mentioned above must be provided.
- m) A document describing how to achieve good quality splices for different fiber types must be provided.

2. Optical Fiber Recoater

- a. Recoat mold for coating range in between 250-300 μ m diameter.
- b. Recoat length of 50mm.
- c. Fiber holders appropriate for fiber diameters above.
- d. Ability to handle both low index polymer and high index polymer.
- e. Power supply for the recoater.
- f. Recoat method – UV LED (not UV lamp) illumination of photosensitive polymers.
- g. Recoating test reports/images showing bad and good quality recoats must be provided.
- h. A document describing how to achieve good quality splices for different fiber types must be provided.

Other requirements:

1. To perform installation at the customer site. To provide training to users at customer site.
2. Supplier should agree to provide Performance test reports prior to dispatch of goods.
3. Compatible operating system(s) for the interface software should be specified. Suitable software drivers available should be specified.
4. Please include other options currently available which can be added on in the future.
5. The cost of shipping to IISc should be included.

6. List of acceptance tests for on-site (vendor) inspection and after installation at IISc.
7. A set of basic experiments for performing routine checks of acceptable operation with clear instructions to be provided.
8. The payment terms will be specified in the commercial proposal and is subject to negotiations.
9. Please provide details of the number of trained personnel in India, number in southern region or in Bangalore who can service the instrument.
10. Service credentials: The supplier should have at least five similar installations in India.
11. Customer list with contact details mandatory to prove your credential.
12. Authorisation letter from OEM manufacturer to be included.
13. Vendor must provide complete compliance statement against each technical point.