

Global tender for “a manual waveguide alignment rig”

Ref: PH/SBM/531/2022-23

Date: 25/10/2022

This is a notice inviting global tenders for the procurement of “a manual waveguide alignment rig” (referred to as equipment or system in this document) that will be utilized for optics experiments. The required technical details including, terms and conditions, are provided below. The last date of reaching the quotation to us is mentioned below.

Specifications:

1. A manual waveguide alignment rig is required for free-space as well as fibre-based input/output coupling. The system should be designed for the precise characterization of micro-optic integrated waveguide-based devices.
2. The system should consist of three units: (a) input x-y-z linear stages, (b) central stage with linear and rotational motions, and (c) output x-y-z linear stages. All three units should be integrated on a single base plate.
3. Travel for input and output stages: ≥ 2 mm in x, y and z axes with ≤ 25 nm resolution
4. Each input and output stage should be lockable and mounted on “rack and pinion slides” with ≥ 35 mm coarse travel along x (optic) axis
5. Motion along different axes should be independent of each other – i.e., no significant cross-talks.
6. Load capacity: ≥ 4 kg
7. Travel for the central stage:
 - a) along y axis (perpendicular to the optic axis): ≥ 50 mm with ≤ 0.5 -micron resolution. Digital position readout is required.
 - b) along z (vertical) axis: ≥ 6 mm with ≤ 2 -micron resolution along z axis
8. Rotation of the central stage around x and z axes: $\geq \pm 3$ deg with ≤ 1 arc sec resolution
9. Rotation of the central stage around y axis $\geq \pm 1$ deg
10. The input and output stages should have slots for mounting lens/fibre holders. The central stage should have a slot for mounting waveguide holders.
11. **Accessories:** The following accessories should be included
 - a) Waveguide holder of approximately 30 mm width, Qty. 1

- b) Plain optic mount for 1-inch optics, Qty. 2
 - c) SM1-threaded (1.035"-40) optic mount, Qty. 3
 - d) Fibre holder compatible with 125/250-micron fibre with ≤ 1 mm jacket diameter, Qty. 1
 - e) Long bare fibre holder compatible with 125/250-micron fibre with ≤ 1 mm jacket diameter, Qty. 1
 - f) Additional clamp sets Qty. 3
12. Accessories and the stages should be compatible
13. The system should be maintenance-free, and suitable for 24/7 operation
- 14. Include pictures of the exact system being offered**
15. The vendor/company and/or their associate (agent) in India should provide after sales service, full support, and repair if required.
16. Warranty: 1 year, please furnish details

Terms and conditions:

1. 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**.
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 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.
3. In the commercial bid, the price should be inclusive of all discounts.
4. The vendor/company should have a track record of having previously supplied similar equipment in well-known national/international institutes/universities (please furnish the details).
5. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.
6. Lead time should be clearly mentioned in the technical and commercial bids.
7. The offer shall be valid at least 90 Days from the date of opening of the commercial bid.

8. The vendor/company should have existence for a minimum of 3 years. (Enclose Company Registration Certificate).
9. 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.
10. The quotations should be on C.I.P. Bangalore basis (by Air Freight only). Please provide itemized cost of the system and required accessories. The quotation should mention the terms of delivery, delivery schedule, estimated delivery date, and payment terms.
11. 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.
12. Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:
 - a. To accept OR reject lowest tender or any other tender or all the tenders.
 - b. To accept any tender in full or in part.
 - c. To reject the tender, offer not confirming to the tender terms.
13. The tender documents can be sent at the following address by post or in-person, and the document should reach us on/before **18 November 2022**.

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