

Request for Proposal (RFP) for the supply and commissioning of Fizeau Interferometer

Technical specifications of the component

Table-1: Performance requirements of the system

Sr. No.	Description	Specifications
1.	Measurement Capability	Should Measure Wavefront error of reflective and refractive optical elements under turbulent and dynamic environments over a cavity length upto 3 meters.
2.	Test Beam Diameter	4".
3.	Laser Source	Single source High Power stabilized He-Ne, Class-IIIa with 3 year warranty, Min 3mW
4.	Camera Resolution	1.2K x 1.2K pixels
5.	Camera Frame Rate	\geq 100 Hz
6.	Optical Zoom	1x to 5x optical encoded zoom
7.	Remote	wireless and wired remotes
8.	Computer and Software	High-performance PC with Windows 10 operating systems, supporting software for image capturing and data processing. Licensed for 20 years.
9	RMS Simple Repeatability	< 0.06 nm or better, $\lambda/10,000$ (2σ)
10	RMS Wavefront Repeatability	< 0.35 nm or better, $\lambda/1,800$ (mean + 2σ)
11	Peak Pixel Deviation	< 0.5 nm, $\lambda/1,200$ (99.5 %)

Additional Accessories:

1. 6" Adjustable mount with $\pm 2^\circ$ tip and tilt adjustment and 4.25" beam height.
2. 6" Self-Centering Element Holder (SCEH) suitable with the 6" inch adjustable mount mentioned above
3. 4" transmission flat with $\lambda/20$ PV.

Conditions for qualification of technical bids

1. Demonstration of (live video /onsite) of the system performance against the Performance requirements given in table-1
2. List of the customers in India who have bought the systems, over the last two years, meeting the performance specifications similar or higher than those given in Table -1
3. Letter of appreciation from the customers on performance of the system.

Expected deliverables:

1. Supply and commissioning of interferometer to meet the performance requirements as per Table-1.
2. Accessories as mentioned under "**Additional Accessories**"
3. Necessary hardware for data acquisition and processing
4. User guides and operating manuals.
5. Necessary test and conformance certificates
6. All the required accessories and cables for installation and functioning of the instrument

Expected Time Schedule

3-4 months from the date of purchase order

For any information/clarifications contact the following

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Administrative matters: “*purchase@iiap.res.in*”.