



IISER PUNE

PRE-BID CONFERENCE FOR PROCUREMENT OF CONTINUOUS WAVE 1000-1100 nm WAVELENGTH ALL SOLID STATE LASER SYSTEM

TECHNICAL & COMMERCIAL QUERIES AND CLARIFICATION

TENDER NUMBER - IISER-PUR-0685-19

DATE : 30.9.19

S.No	Query/Clarification Sought	Clarification / Amendment
1	<p>Detailed specifications for Items no 19, 20 and 21 on page 21 of 38 in tender document</p> <p>Item no 19: 2 qty. of Acousto-optic modulators suitable for the above the laser. Operating RF frequency 80-120 MHz, RF drive power < 2 W, diffraction efficiency >60 %</p> <p>Item no 20: Two High power capability single mode optical fibers (2 mters length each) for the above wavelength with appropriate collimators for input and output coupling</p> <p>Item no 21: 2 Qty Polarising Beam splitter cubes, 4 Qty. Half-wave plate and 6 Qty. 1 Inch diameter dielectric mirrors for the above laser</p>	<p><u>Specifications of Item no 19 (Acoustooptic Modulators):</u></p> <ol style="list-style-type: none">1. Active aperture: > 2mm2. Material: Suitable material for handling 1000 - 1100 nm wavelength3. Anti-reflection coating: < 1% reflection in the wavelength band 1000 - 1100 nm4. Rf drive power: less than equal to 2 W to 5 W5. Diffraction efficiency: >75 %

6. Optical damage threshold: suitable to handle 50 W of incident CW laser power

Specifications of Item no 20:

1. Length: 2 meters
2. Modal performance: Single mode transmission
3. Mode field diameter: Suitable for 1000- 1100 nm
4. Continuous power handling capability: Far greater than 50 W so that fiber can sustain transmission of > 50 W laser light over extended periods of time
5. Collimators: Operating wavelength between 1000 - 1100 nm
6. Connector type: non-contact receptacle (compatible cleaving according to the above mentioned fiber)
7. Expected output beam size(1/e² diameter): 2 mm
8. Focusing type = adjustable focus
9. Polarization: Polarization Maintaining

Specifications of Item no 21:

Polarising beam splitter (PBS) cubes

1. Polarising beam splitter cubes: size > 0.5" x 0.5" (½ inch by ½ inch)

2. Transmisison: $T_p > 90 \%$
3. Reflection: $R_p > 99 \%$
4. Extinction ratio ($T_p:T_s$): better than 1000:1
5. Surface quality: 40-20 Scratch dig
10. Power handling capacity: Far greater than 50 W so that the PBS cubes can sustain transmission and reflection of > 50 W laser light over extended periods of time

Specifications for Half wave plates:

1. Retardation: $\lambda/2$ at 1064 nm
2. Retardation accuracy: better than $\lambda/300$
3. Clear aperture: >10 mm diameter
4. Mounting: Mounted on a 1 inch diameter standard mount
5. Power handling capacity: Far greater than 50 W so that the waveplate can sustain transmission and reflection of > 50 W laser light over extended periods of time
6. Optical quality: better than 40:20 scratch dig

Specifications Dielectric mirrors:

1. Reflection: $> 99 \%$ in the wavelength band of 1000 - 1100 nm for $0 - 45^\circ$ incidence angles for both S and P polarization.

		<p>2. Diameter: 1 inch</p> <p>3. Surface flatness = $\lambda/10$ at 633 nm</p>
2	50 W across the tuning range 1000 - 1100 nm?	We want the laser at a single wavelength. We don't want tunability. When we say 1000 - 1100 nm, the laser's center wavelength could be anything in this range, however, the spectral line width should be as mentioned in the section 'spectral line width' item no 6. of the original specifications i.e < 100 kHz FWHM as measured in 100 ms time.
3	If we submit the quote, on the behalf of foreign Principal in Indian Rupees can we get the exemption in EMD and Tender fee.	No Exemption is provided to bidders who quote on the behalf of foreign principal in Indian Rupees.