



**CENTRE OF PROPULSION TECHNOLOGY (CoPT)**  
**INDIAN INSTITUTE OF TECHNOLOGY MADRAS**  
**CHENNAI – 600036, INDIA**

Ref. No. MEE/1718/389/COPT/SRIS/037

Date: 30.07.2020

**Item name: Supply of 532nm Diode Pumped solid State Laser with Line Optics for Flow Visualization**

**Due Date: 21.08.2020**

1. Quotations are invited **in single bid system** for the item described overleaf (in Annexure I). The offer /bid should contain detail of the compliance to the technical specifications and the commercial. The Financial part should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms etc. The words "Tender for supply of 532nm Diode Pumped solid State Laser with Line Optics for Flow Visualization" should be written on the left side of the Outer bigger cover and sealed.
2. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
3. The total cost of the equipment in terms of CIP Chennai should be clearly mentioned .
4. Terms of warranty and guarantee should be explicitly mentioned.
5. Warranty service must be provided on-site at IIT, Madras for duration of warranty period.
6. Packing and delivery charges, customs and clearance duty should be clearly stated.
7. Goods shall not be supplied without an official supply order.
8. Local firms : Quotations should be for free delivery to this institute. If quotations are for ex-godown, delivery charges should be indicated separately.
9. Firms outside Chennai: Quotations should be for F.O.R. Chennai. If F.O.R. consignor station, freight charges by passenger train / lorry transport must be indicated. If ex-godown, packing, forwarding and freight charges must be indicated.
10. If the required good is to be imported, delivery with CIP upto Chennai airport must be made. All relevant documents for customs clearance and other import formalities have to be provided well in advance.
11. IIT Madras is eligible for concessional rate of GST 5%(for purchase of equipments, parts and consumables used in research). Concessional GST certificate will be issued after issue of purchase order.
12. The rate of sales / general taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for sales / general taxes will be admitted at any stage and on any ground whatsoever.
13. Payment :Payment is after delivery of goods. Every attempt will be made to make payment within 30 days from the date of receipt of bill / acceptance of goods, whichever is later. Advance payment will be considered only in special cases.
14. IIT Madras is eligible for concessional rate of customs duty. Necessary certificate will be issued on demand.
15. IIT Madras has the right to accept the whole or any part of the tender or portion of the quantity

offered or reject it in full without assigning any reason.

*Srikrishna Saha*



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16. Optional: Extended warranty quote to be quoted for 1 year and 2 year beyond normal warranty term
17. Optional: Quote to be provided for AMC beyond the extended warranty
18. The sealed quotation may be sent to:  
The Purchase Manager,  
CoPT OFFICE, NCCRD Building  
Behind Aerospace Engineering Dept., IIT Madras,  
Chennai – 600036, Ph. (O) +91-44-22579863

## ANNEXURE -1

Srikrishna Saha

### Technical specifications for Item: 532nm Diode Pumped solid State Laser with Line Optics for Flow Visualization

<i>Item: 532nm Diode Pumped solid State Laser with Line Optics for Flow Visualization</i>	
Wavelength	532 nm $\pm$ 1nm
Output Power (W)	> 3W
Output	Frees space coupling
Working Mode	Continuous Wave (CW)
Beam Mode	Transverse : Near TEM00
Power Stability	<3.0 % @ 2 hours
Spectral Line Width	~ 0.5 nm
Beam Quality (M <sup>2</sup> factor)	<1.5
Beam Diameter	< 2.0mm
Beam Divergence	<2.0 mrad
Polarization	Vertical
Polarization ratio	100:1
Warm-up time	< 15 minutes
Operation temperature	10~35 °C
Dimensions of Laser Head (maximum)	100(H)x100(W)x250(L) mm <sup>3</sup>
Life Time	> 10,000 hours
Power supply	Continous variable power
Warranty	1 year
<b>Accessories</b>	
<b>Line sheet Optics</b>	
Fan Angle (full angle)	30°-35°
Line Length	~ 0.55 meter (at 1 meter distance)
Line Width	~ 1.5mm @ 1 meter distance



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Other requirements	
Warranty	1 year
Line sheet should be easily Detachable by user when required and should be able to attach without further alignment.	
Vendor Should have at least 1 system installed in India, with same light sheet configuration. Vendor should provide the details of end user with contact details.	
Technical Compliance and the exact specification of the laser quoted should be mentioned in the quotation against each parameter. If the exact specification of the laser quoted is not mentioned the limited tender bid is liable to be disqualified.	

Contact person for technical clarifications:

1. Prof. Srikrishna Sahu

E-mail: [ssahu@iitm.ac.in](mailto:ssahu@iitm.ac.in)

*Srikrishna Sahu*