

TECHNICAL BID PROFORMA

Item Name: “High Speed Double Cavity Double Pulsed Nd-YLF PIV Laser ”

Bidder Eligibility Criteria:

| 1.0 | Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India) | Class I / Class II | Local Content value | Reference, Page No. |
|-----|---|------------------------|---------------------------|------------------------|
| I | Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein. | | | |
| 2.0 | Bidder Eligibility Criteria-II | Compliance (Yes/No) | Reference Page No. | Remarks, If any |
| 1 | The bidder/OEM should have supplied at least 3 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 10 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation. | | | |

3.0 Technical Compliance:

Technical specifications required for one High Speed Double Cavity Double Pulsed Nd-YLF PIV Laser Specifications: -

| S. NO | Technical Specifications | Complied / Not Complied | Reference Page No. |
|-------|--|----------------------------|-----------------------|
| 1 | Laser wavelength: 527 nm | | |
| 2 | Repetition rate: Single shot to 10 kHz | | |
| 3 | Configuration: Double cavity | | |
| 4 | Pulse energy from single cavity: 30 mJ at 1 kHz | | |
| 5 | Pulse width : less than 200 ns at 1 kHz | | |
| 6 | Beam diameter, at exit: <10 mm | | |
| 7 | Cooling system: Water-cooled | | |
| 8 | Chiller with water as a cooling medium for adequate cooling of the laser, which works up to an ambient air and water temperature of 40°C should be provided. | | |

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|----|--|--|--|
| 9 | Control Software: A PC based software interfacing the laser with graphical user interface (GUI) to control laser power, timing of the pulses and pulse separation. | | |
| 10 | Triggering Option: BNC-Trigger (External TTL Triggering) and Software trigger | | |
| 11 | Operating conditions: Should operate even at 80% relative humidity. | | |
| 12 | Ambient temperature: 18 to 30 degrees C or more | | |
| 13 | Input power-line frequency: 50 Hz | | |

| Sl.No. | Other Requirements | Compliance (Yes/No) | Reference Page No. |
|--------|--|---------------------|--------------------|
| 1 | Installation and service: Onsite (IIT Madras) Installation and Commissioning | | |
| 2 | Warranty: One year from the date of installation for both laser and water-cooled chiller required and 2 Year Extended warranty to be quoted as optional. | | |
| 3 | Training on the operation of the system should be provided. | | |

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)

**SIGNATURE OF BIDDER ALONG WITH
SEAL OF THE COMPANY WITH DATE**