

Request for Quotation

REF: AE/VA/2018/07/17

Subject: Quotation to supply: **One single cavity Nd:YAG laser, along with the light sheet optics and laser beam guiding arm**

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover (**technical** and **financial** bid should be in separate sealed envelopes) in order to reach us on or before **5 PM, 10/08/2018** in the form of a **hard copy** to the address mentioned below.

The requirement is one single cavity Nd:YAG laser and associated optical parts as mentioned below.

Sr. no.	Product name	No. of units
1.	<p><u>Nd:YAG laser (single cavity, pulsed):</u></p> <p>Repetition rate: 10 Hz or more Wavelength: 532 nm, 1064 nm (should have simple arrangement to get output of either 532 nm or 1064 nm) Pulse energy: 430 mJ or more at 532 nm and 800 mJ or more at 1064 nm Pulse duration: 8 ns or less (at both 532 and 1064 nm) Beam diameter: 10 mm or less Beam divergence: 0.5 mrad or less Beam pointing stability: 100 μrad or less Timing jitter: 1 ns or less Cooling: air/water cooled, if water cooled then chiller should be provided. Lamp lifetime: 20 million shots or more Power supply: should be compatible with Indian electric supply specifications and fixtures Trigger: external trigger 5 V TTL (for operation through synchronizer), internal trigger (for operation through PC, also include the software)</p>	1
2.	<p><u>Light sheet optics:</u></p> <p>Minimum light sheet thickness: less than 0.5 mm Input beam diameter: 3 to 20 mm Mounting: mechanical adapter for direct mounting on laser head of the laser mentioned above Focal length: adjustable (300-2000 mm) Light sheet divergence: 10, 20, 30 degree by changing exit lens (also include the lens) Orientation: 360 degree adjustable light sheet orientation Parallel light sheet output up to 100 mm width Pulse energy rating: all the components should be compatible with the above mentioned laser [430 mJ or more (@532 nm)] Packaging: single, compact unit, simple adjustment of both light sheet thickness and light sheet angle orientation</p>	1

3.	<p>Articulated laser arm interface: (light guiding arm to easily connect the laser head to the light sheet optics)</p> <ul style="list-style-type: none"> - the structure should have atleast 7 joints with ability to rotate by 360 degree freely - fully deployed length greater than 1500 mm - clear aperture greater than 15 mm - transmission loss less than 20% - suitable for automatic traversing - mounting blocks to connect arm with the laser and the light sheet optics should be included - compatible with the above mentioned laser and the above mentioned light sheet optics - simple to set-up and adjust and have high mechanical stability - facilitate safe beam guidance between laser and experiment 	1
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- Minimum warranty period for all the parts should be 24 months
- All the above items should be successfully installed and commissioned at IITK
- Prices should include other additional charges, i.e. freight, insurance etc...
- Installation charges should be included
- Maximum educational discount should be shown explicitly in the quotation
- Any other essential accessories for the functioning of the above mentioned products should also be included

Sincerely,

Date: 17/07/2018

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