

Request for quotation

Enquiry number: AE/KP/2016/LASER

Enquiry date: 28/03/2016

Closing date: 13/04/2016

Subject: Purchase of **Diode Pumped Nd:YLF** high frequency laser system with **optional light sheet optics** and **articulated light arm**

Dear Sir/Madam,

Quotations for the above items are requested in sealed envelopes. **Please send two separate sealed envelopes for the technical bid and price bid, respectively.** The quotations should reach on or before 13th April, 2016 to the address given below.

Preferable technical specifications for the laser system:

- Laser energy should be at least **38mJ per pulse per head** at **1 kHz** repetition rate at **527nm**
- Laser should be dual head for PIV application
- Minimum frequency range: 1-1kHz in full energy
- Frequency should be variable within 1-1kHz in full energy
- Beam diameter <5 mm
- Pulse width has to be as low as possible to freeze the seeding particles; required width <150 ns
- Beam divergence < 8mrad
- Desirable pulse to pulse energy stability approximately 1%
- Single phase power supply (weight should not cross 150 kg)
- Laser head should not weigh more than 75 Kg
- Desirable operating temperature range: **5°C to 40°C**
- **Time delay between pulses has to be adjustable**
- It should be compatible for **external TTL triggering from usual PIV synchronizers** (IDT & TSI make)

Optional Items:

1. **Light sheet optics:** Continuous adjustable light sheet optics with desirable focal length between 0.3m to 3m **with necessary mountings and mechanical arrangements to fit directly to the laser head as well as at the end of the light delivery arm.**
2. **Articulated light arm:** Light arm with 360° beam orientation, light weight and high energy coating to take care minimum of 200mJ/ pulse energy; minimum extendable length should be 1.8m. This also should be supplied with **necessary mechanical arrangements to fit directly to the laser head.**

Terms and conditions:

- Quotation should have a validity of minimum of at least 60 days
- The equipment should be provided with a **warranty of at least TWO YEARS**
- The delivery time frame should be specifically indicated
- Quotation should be FOB or FCA basis

Note: Since the equipments are going to be used for educational purpose, maximum educational discounts should be applied.

Address for the quotation:

Dr. Kamal Poddar

Department of Aerospace Engineering

Indian Institute of Technology

Kanpur-208016, India, e-mail: kamal@iitk.ac.in Phone: +91-512-2597843