Quotation Notice

OPTO/P-14/2014-15

Quotations are invited for the following necessary laser components for the fabrication of Nd-YAG laser (Side Pumped) with second harmonic set up in the Department of Optoelectronics, University of Kerala, Kariavattom, Thiruvananthapuram.

Laser components for the fabrication of Nd-YAG laser (Side Pumped) with second harmonic set up:

All components to go on the carrier rail should have appropriate mounts:

1. The expected average power for modulation frequency-5 KHz is 16 W, and for 10 KHz is 24 W
2. C carrier rail (SS Make or Aluminium) -150 cm
3. Pump champer with side pumped laser diode array and with Nd-YAG rod-3mm dia length 78mm
4. **FRONT MIRROR (OUT PUT COUPLER -IR):** (Reflectivity - 70,75,80,85,90,95% - 1 each)
   - DIAMETER: 19.05mm
   - THICKNESS: 9.5mm
   - SURFACE 1: 80%R@ 1064nm
   - SURFACE 2: AR@ 1064nm
   - ANGLE OF INCIDENCE: 0 Degree
   - SURFACE 1/2 QUALITY : 10-5 S/D
   - SUBSTRATE MATERIAL: Fused Silica
5. **BACK MIRROR (HR MIRROR -IR):** Reflectivity-99.98%
   - DIAMETER: 19.05mm
   - THICKNESS: 9.5mm
   - SURFACE 1: HR@ 1064nm
   - SURFACE 2: Uncoated
   - ANGLE OF INCIDENCE: 0 Degree
   - SURFACE 1 QUALITY : 10-5 S/D
   - SUBSTRATE MATERIAL: Fused Silica
6. Acousto optic switch-Q Switch carrier frequency-27.12 MHz, Modulating frequency-500 Hz-50KHz
7. Metallic aperture/spatial filter-4 nos. (SS Make or Aluminium)
   - Dia.: 9 mm, 1mm, 1.1mm, 1.2mm - 1 each
8. **PLATE POLARIZER:** 2 nos.
   - SHAPE: Square- 10x10mm
   - THICKNESS: 2.2mm
   - SURFACE 1: 10-5 S/D
   - SURFACE 2: 10-5 S/D
   - ANGLE OF INCIDENCE: 56 Degree
   - SUBSTRATE MATERIAL: N-BK7
9. **LASER BEAM EXPANDER:**
   - Expansion ratio-2-8x (Variable)-532nm
10. **LASER BEAM EXPANDER:**
    - Expansion ratio-2-8x (Variable)-1064nm
11. **Power supply for laser diode array- DC 30V, 22 ampere, constant current**
12. **Laser cooling system-water to water**
13. **Q-switch driver for acousto optic system-27.12 MHz, Modulating frequency-500 Hz-50KHz**
14. **Neutral density filter-absorptive type 1 set for 532nm and one set for 1064nm**
15. **Second harmonic setup- suitable for getting an average power of 8W at modulation frequency 5KHz and 10W at modulation frequency 10KHz**
16. **Laser safety goggles – 1 each for 1064 nm and 532nm**
17. **Laser power meter- beam dia 1mm**
18. **Honeycomb table top with pneumatic vibration isolation - 180cm x 120cm x 20cm -1no**
   Also quote separately for without pneumatic vibration isolation (with rigid support)-1 no

Any other essential optical/mechanical items please mention it and quote separately

The firms who wish to supply the items are requested to submit the quotation in sealed cover to the undersigned on or before 21.03.2015.

04.03.2015

[Signature]

Professor & Head

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