



Department of Electrical Engineering, Indian Institute of Technology, Delhi

Hauz Khas, New-Delhi -110016, India

NIQ no. IITD/EE/PLN03-BEEN

Due Date: **21.3.2012, 5 PM**

Notice inviting quotations for a Spectrum Stabilized, 532 nm, Single Mode, Diode Laser

Sealed quotations are invited for a single mode laser that has spectrum stabilization and has 532 nm center wavelength. The purchase will be made through a two part bidding process. Technical and Financial bids have to be made separately. Complete technical information should be provided along with the Technical bid. Please refer to the page on Terms and Conditions for details on how and when to submit the Technical and Financial bids.

Required Specifications for the 532 nm, Single Mode Diode Laser

1. The maximum power of the laser should be 20 mW.
2. The laser should be spectrum stabilized.
3. The laser should have a single mode.
4. The center wavelength of the laser should be 532 nm (+/- 1 nm).
5. The maximum line width (FWHM) of the laser should be 1 nm.
6. The warm-up time should be less than 5 minutes.
7. The mode of operation of the laser is continuous wave/modulated.
8. Long-Term Power Stability should be less than +/- 3%.
9. RMS noise should be less than 0.5% (20 Hz to 500 MHz).
10. The temperature of operation should be between 10-35 °C.
11. The laser should have thermoelectric cooling.
12. The laser should have optical fiber coupling.
13. The laser should have an expected lifetime > 10,000 hours.
14. The warranty for the spectrometer should be at least 1 year.

Asst. Prof. A. Dhawan
(Principal Investigator)

Terms and Conditions

1. Please submit the TECHNICAL and FINANCIAL bids in separate sealed envelopes. Mark the two envelopes clearly as "Technical Bid" and "Financial Bid" respectively. Both the sealed envelopes should be sent in a single sealed envelope, clearly marked as "Quotations for a Spectrum Stabilized Laser". The quote should reach the following address on or before **21.03.2012, 5 PM:**

Dr. A. Dhawan
Block II, Room 216,
IIT Delhi, Hauz Khas,
New Delhi, 110016, India

2. Please quote prices at FOB New Delhi, inclusive of all taxes and duties.
3. Quote should be in Indian Rupees for Indian agents, or in foreign currency, for foreign agents, and needs to be valid for at least three months.
4. Attach all the technical literature and a list of similar installations done in India.
5. If the quote is being submitted by a representative of the manufacturer, a valid agency-ship or dealership certificate authorizing the agent to quote to IIT Delhi on behalf of the manufacturers should be enclosed.
6. Complete set of manuals for the operation of the equipment should be given.
7. Clearly specify the installation requirements – such as space, power, frequency, environment etc.
8. If the item quoted is proprietary in nature, please enclose proprietary certificate from the principals stating, "Certified that _____ is a proprietary of M/s _____ and no other manufacturer makes this item."
9. Please attach a signed and stamped compliance chart for the specifications. The format of the compliance chart is attached to this document.
10. Please specify all of your terms and conditions clearly, including delivery period.
11. Preferred modes of payment for foreign agents are through letter of credit, or as payment on delivery. For Indian agents, typically payment is on delivery.
12. The Institute reserves the right to accept or reject any or all quotations without assigning any reasons thereof.

Asst. Prof. A. Dhawan
(Principal Investigator)

Compliance Chart

| | Parameter | Requirement | Model Spec | Complies |
|----|---------------------------|----------------------------|------------|----------|
| 1 | Power of the laser | 20 mW | | |
| 2 | Spectrum stabilized | Present | | |
| 3 | Single mode | Present | | |
| 4 | Line width (FWHM) | < 1 nm | | |
| 5 | Center Wavelength | 532 nm | | |
| 6 | Warm-up time | < 5 minutes | | |
| 7 | Mode of operation | Continuous Wave/Modulated | | |
| 8 | Long-Term Power Stability | < $\pm 3\%$ | | |
| 9 | RMS noise | < 0.5 % (20 Hz to 500 MHz) | | |
| 10 | Temperature of Operation | 10-35 °C | | |
| 11 | Thermoelectric cooling | Present | | |
| 12 | Optical fiber coupling | Present | | |
| 13 | Expected lifetime | > 10,000 hours. | | |
| 14 | Warranty | at least 1 year | | |