

Indian Institute of Technology
Department of Mechanical Engineering

Date: 12.07.2013
Closing Date: 27.07.2013

Enquiry number: **IITK/ME/NNK/02**

Quotations are invited from interested parties for purchase of an Acousto-Optic Modulator (AOM) and a Radio Frequency Driver (RF Driver) as per following specifications.

Specifications:

- 1. AOM Specifications:** (Quantity= 1)
 - a. AOM for a He-Ne LASER
 - Wavelength= 633nm
 - Polarization state & direction= Polarized; minimum polarization ratio (500:1)
 - Beam Diameter = 0.81mm
 - Minimum LASER output power= 5mw
 - b. AOM acoustic mode: Longitudinal
 - c. Interactive Material: TeO₂
 - d. AR Coated
 - e. Static transmission: $\geq 95\%$
 - f. Diffraction Efficiency: $\geq 85\%$ at 633nm with linear polarization perpendicular to the acoustic propagation or random polarization.
 - g. Rise Time: 50ns-150ns/mm Beam Diameter
 - h. Deflection angle: 11mrad-12mrad at 633nm
 - i. Impedance: 50 Ohms Nominal
 - j. Operating frequency: 80 MHz
- 2. RF Driver Specifications:** (Quantity= 1)
 - a. Output frequency: 80 MHz
 - b. Stability: $\pm 0.01\%$ Quartz stability
 - c. Spurious Levels: -50dBc Maximum
 - d. Harmonic Distortion: -15dBc Maximum
 - e. Digital Input: TTL Levels
 - TTL HIGH- Full RF Power
 - TTL LOW- Minimum RF Power
 - 0 Volt- Minimum PF power
 - f. RF Output Power: ≤ 1 Watt
 - g. Impedance: 50 Ohms Nominal
 - h. Supply Voltage: +24 VDC ± 0.5 Volt
 - i. Supply Current: 1 Amp Maximum
 - j. RF Output connector: BNC Female
 - k. Modulation Input connector: BNC Female
 - l. Power Supply Connection: Solder Post, Golden Lug

Please provide technical and financial bids in separate sealed envelopes.

In the document for technical bid, mention in tabular form the compliance to each of the above specifications. In addition, also provide:

1. Authorization Certification, if any form the principal manufacturer
2. Technical specification in detail
3. Warranty period
4. List of clients and testimonials of services rendered. Those with a better record of after sales services may be given preference.

NOTE: Payment terms will be as per IIT Kanpur rules. Validity of the Quote should be for a minimum of 60 days.

Please send technical specifications and financial specifications in separate sealed envelopes to the undersigned clearly mentioning the following information by July 27, 2013.

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