

Indian Institute of Technology Kanpur
Department of Electrical Engineering

Enquiry No: PK/EE/DST/2012

Opening: 1st January 2012

Closing: 9th January 2012

Sealed tenders are invited for "Tunable Laser" with following specifications

Wavelength Range	C Band (2 nos.) L Band 2 nos.
Frequency Resolution	100 MHz
Fine tuning resolution	1 MHz , typical
Absolute wavelength accuracy	± 22 pm (± 2.5 GHz)
Relative wavelength (frequency) accuracy	± 12 pm (± 1.5 GHz)
Wavelength (frequency) repeatability	Typical ± 2.5 pm (± 0.3 GHz) 2
Wavelength (frequency) stability	Typical ± 2.5 pm (± 0.3 GHz), 24 hours
Tuning time	Typical < 30 sec 3
Max. output power	Typical $\geq +15$ dBm
Power stability	Typical ± 0.03 dB over 24 hours 2
Power flatness	Typical ± 0.2 dB (full wavelength range)
Power repeatability	Typical ± 0.08 dB
Linewidth (should have the capability of being widened with SBS control if not desired)	Typical < 100 kHz (SBS suppression off)
Side mode suppression ratio (SMSR)	Typical 50 dB
Source spontaneous emission (SSE)	Typical 50 dB/ 1 nm 1 Typical 60 dB/ 0.1 nm 1
Relative intensity noise (RIN)	Typical -145 dB/Hz 1 (10 MHz to 40 GHz)
Grid spacing	100 GHz, 50 GHz, 25 GHz, or arbitrary grid
Fine tuning speed	15 sec from -6 GHz to +6 GHz
Power attenuation range	8 dB
Power setting resolution	0.1 dB
Residual output power (shutter closed)	≤ -45 dBm
SBS suppression FM p-p modulation range	0 GHz to 1 GHz
SBS suppression dither frequency	20.8 kHz
Connectivity, rear panel	USB 2.0, LAN 10/100 Mbit/s, GPIB
Fiber type	9/125 μ m panda PMF
Connectivity	FC/APC angled
Polarization extinction ratio	16 dB typical
Output isolation	30 dB typical

All the laser sources should be a part of a single chassis

Should be Code compatible to Agilent's Lightwave Measurement System modules

Should have Built-in international power supply

Should follow SCPI command set

Should support Agilent IO libraries and a should have a PC-based graphical user interface

Should be able to store two instrument configurations and recall it.

Should provide multi-interface control via USB2.0, LAN, GPIB; even at the same time

Should be possible to have 4 different users access the 4 channels.

The vendor should provide local repair, calibration and technical support with 3 years warranty.

Terms and Conditions:

1. Quotation should be valid for 90 days
2. IITK is exempted from excise/custom duty
3. Send complete detail of the products
4. Payment terms: 90% on installation and 10% on satisfactory report

Address

Dr. Pradeep Kumar K
Assistant Professor
Department of Electrical Engineering
IIT Kanpur
Kanpur-208016, India