

450-1000nm Fixed external cavity diode laser

TUNABLE LASERS (ECDL)



450-1000nm Fixed external cavity diode laser Precilasers' fixed external cavity semiconductor lasers feature mode-hop-free operation, narrow linewidth, ultra-low intensity noise, and an ultra-wide modulation bandwidth. These characteristics make them ideal for a wide range of research applications, including atomic gravimeters, optical lattices, lidar, coherent optical communications, high-precision optical sensing, optical metrology, and precision spectroscopy.

- Narrow Linewidth Low Intensity
- Noise High
- Speed Tuning Possible Linear
- Polarization Never Mode
- Excellent Beam Quality
- Rb Atom Experiment and
- Application Optical Phase Locking
- Fiber Optic Sensing

Specifications

Parameter	Specification
Available Wavelength Options	450-1000nm
Typical Wavelengths	461nm / 679nm / 689nm / 698nm / 707nm / 780nm / 795nm / 813nm / 852nm
Linewidth (1) (100µs integration time)	<200kHz/100kHz (2)
Temperature Frequency Tuning Range (Never mode hop)	>5GHz
Package Type	Butterfly Package, No isolator / With current source and temperature control drive, Built-in isolator
Output Power	>15mW / >15mW/30mW (3) / >10mW/20mW (3) / >10mW/20mW (3)
Output Mode	Free Space / Free Space / Fiber Output / Fiber Port
Beam Quality	TEM00mode,M2<1.3 / TEM00mode,M2<1.3 / TEM00mode,M2<1.1 / TEM00mode,M2<1.1
Polarization Extinction Ratio	>20dB
Power Stability (3 Hours RMS)	<1%
Intensity Noise (10Hz-10MHz integration)	<0.03%
Intensity Noise (10kHz)	<-140dBc/Hz
Current Tuning Range	>500MHz
Current Tuning Bandwidth	>1MHz
Weight	Driver version included, <1.5kg
Operating Temperature	0-60°C
Power Consumption	<3W
Powered By	5VDC, 1A, power adapter included

Source: WaveQuanta product database. For ordering, customization (wavelength, power, package) and quotation, contact sales@wavequanta.com.