

# 630-1600nm External cavity diode laser

## TUNABLE LASERS (ECDL)



630-1600nm External cavity diode laser Based on cat eye laser architecture, Precilasers' external cavity diode laser has very narrow linewidth and wide tuning range, has been widely used in optical precision measurement, quantum computing, quantum precision measurement.

- Narrow Line Width Wide
- Tuning No Mode Hopping
- Wide Range Ultra
- Intensity Noise
- Optical Precision Measurement Quantum
- Computing Quantum Precision Measurement

### Specifications

| Parameter                                | Specification   |
|--|---|
| Central Wavelength                       | 630-1600nm  |
| Tuning Range                             | 630-633/760-780/775-795/1010-1030/1030-1053/1040-1063/1050-1070nm   |
| Output Power                             | >10mW (Typical)   |
| Output Mode                              | Single-mode polarization-maintaining fiber output, FC/APC connector |
| Line Width (1) (100us integration time)  | <50kHz(Typical<30kHz)   |
| Mode-hop-free Tuning Range               | >5GHz (Typical)   |
| Frequency Stability                      | <100MHz/°C  |
| Polarization Extinction Ratio            | linear,>20dB  |
| Power Stability (3 Hours RMS)            | <0.75% @3hrs, RMS   |
| Beam Quality                             | M <sup>2</sup> <1.1   |
| Intensity Noise (10Hz-10MHz integration) | < 0.015%  |
| Intensity Noise (10MHz)                  | <-140dBc/Hz   |
| PZT Tuning Range                         | >5GHz   |
| PZT Tuning Bandwidth                     | >5kHz   |
| Current Tuning Bandwidth, DC             | >0.6MHz   |
| Current Tuning Range, AC                 | 400kHz-400MHz   |
| Current Tuning Range, DC                 | 250MHz  |
| Temperature Control Accuracy             | ±1mK, rms, 3hrs   |
| ASE Spectral Signal-to-noise Ratio       | >40dB   |
| Output Isolation                         | >30dB   |
| Cooling                                  | Air Cooling   |
| Controller Weight                        | <10kg   |
| Laser Head Weight                        | <5kg  |
| Operating Temperature                    | 15-30°C, No condensation conditions                                 |
| Power Consumption                        | <20W  |
| Power Supply                             | 100V-240V, AC, 50/60Hz  |
| Communication                            | RS422   |

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