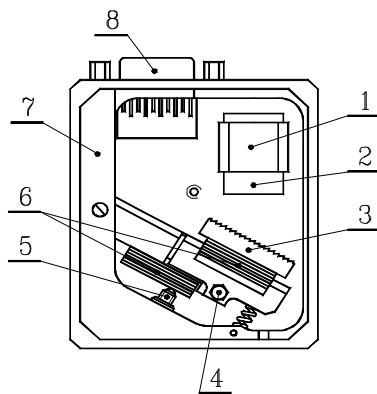


Extended Cavity Diode Laser

The extended cavity diode laser ECDL-XXXXR is a tunable source of high-coherent radiation. The laser can be used in metrology, high-resolution spectroscopy and interferometry. ECDL-XXXXR consists of an optical head and an electronic unit connected by a cable of about 2 metres long.

ECDL - XXXXR



1. Module mount
2. LD module
3. Diffraction grating
4. Locking screw
5. Tuning screw
6. Piezo elements
7. Case
8. Connector

Specifications

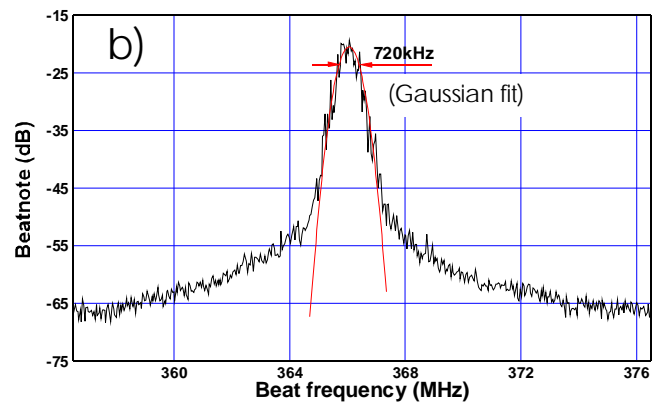
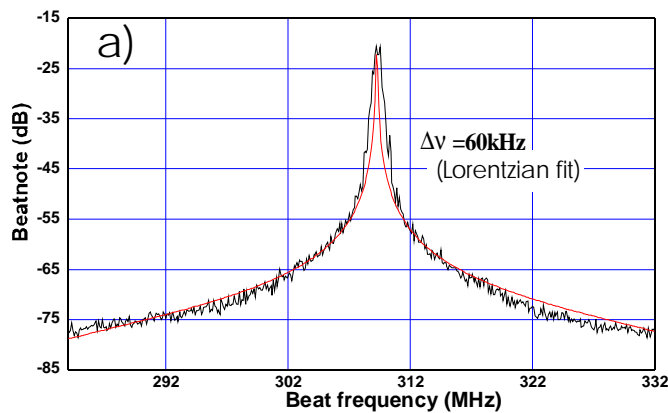
Wavelength	630-900, 1300, 1550 nm
Linewidth	1 MHz
Output power	3-20 mW
Continuous tuning range	
by PZT only	>6 GHz
by PZT+LD current	>30 GHz
Coarse tuning range	±2 nm
Polarization	linear vertical
Beam shape	elliptical 5x1.5 mm ²
Optical head dimensions	66x50x34 mm ³
Electronic unit dimensions	260x210x70 mm ³
Optical head weight	170 g
Electronic unit weight	2,8 kg

Extended Cavity Diode Laser

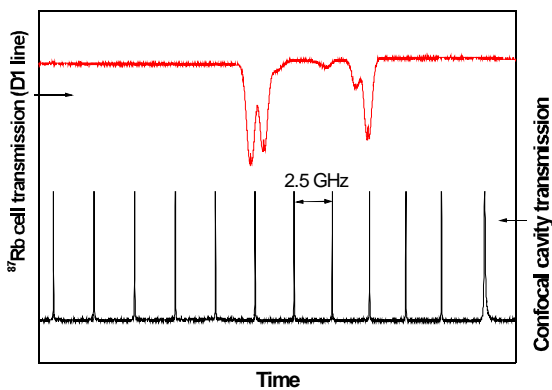


ECDL - XXXXR
(optical head)

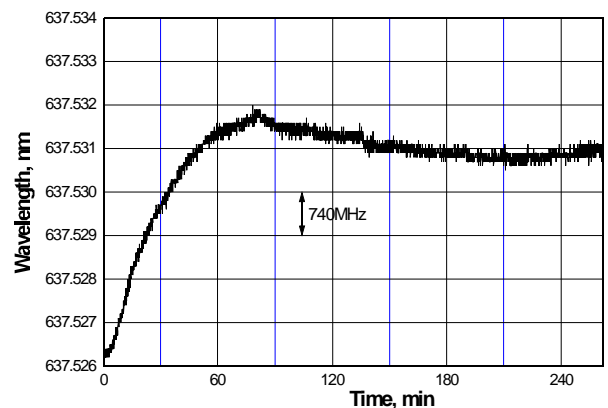
- Rigid compact design.
- Littrow scheme.
- LD and case are both independently thermostabilized.
- Two piezo elements synchronize the rotation and translation of the defraction grating.
- In phase PZT and current tuning.
- Excellent wavelength stability.



The beatnote of two identical ECDLs (the resolution of a spectrum analyzer 300kHz, the recording time 1s (a) and 0.5 s (b))



The laser frequency tuning by PZT



The wavelength behaviour from the moment of switching the laser on.