

# Radiant Dyes Laser & Accessories GmbH

## Tunable Narrowband Diode Laser Interference-filter-stabilized with external cavity

### Specifications:

- Very small Bandwidth (down to 30kHz)
- Typical Wavelength: 780nm, 798nm, 852nm (others on demand)
- Typical Output Power: > 50 mW
- Tunability: 7 GHz Mode-Hop Free by Piezo Scanning, up to 20nm with mechanical tuning and Mode-Hopping
- Design by Observatoire de Paris

### Advantages:

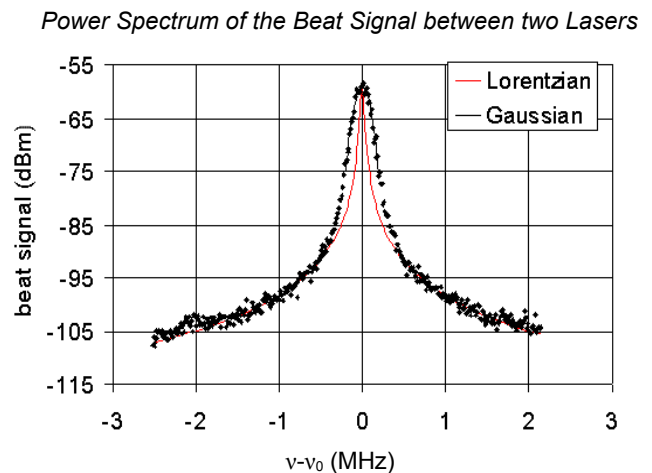
- Very high robustness against mechanical and thermal disturbances
- Fixed Output Beam
- Application under extreme conditions, e.g. in space

### Typical Applications:

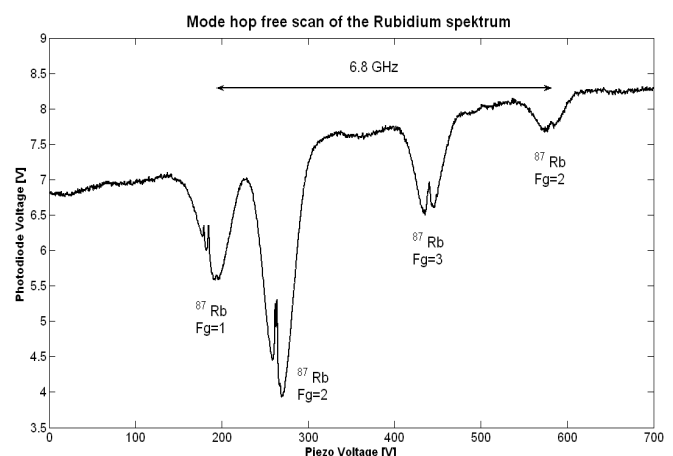
- High Resolution Spectroscopy
- Raman Spectroscopy
- Laser Cooling

### Optional Features:

- Amplification
- Frequency doubling



Typical Application: Rubidium Spectrum measured with NarrowDiode Laser by Radiant Dyes



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## Tunable Narrowband Diode Laser



Our new NarrowDiode Laser is a small sized and low priced external cavity Diode Laser. The wavelength separation is realized by a low loss interference filter instead of the common diffraction grating.

Due to this new design, the Laser is characterized by a very **high robustness** against mechanical and thermal disturbances.

Another advantage of our Laser is the **fixed output beam**, that leads to a very **high stability**, because the direction and position of the output beam are almost independent from the wavelength.

Furthermore, the Laser guarantees a very **small bandwidth** and a very **large tunability** at the same time.