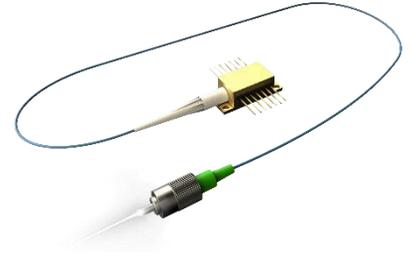


Narrow Linewidth Laser (NLL) Optical Spectral Engine (OSE6)

DAYY Photonics Corporation cooled narrow linewidth laser (NLL) is packaged in a 14-pin BTF package with a single frequency emission. The OSE6 family is based on proprietary external cavity laser design utilizing a built-in fiber Bragg grating, offering very stable performance of lasing wavelength, narrow spectral linewidth and excellent side mode suppression ratio (SMSR).

The lasing wavelength can be specified precisely to 1nm. The device can be directly intensity modulated up to 600MBPS. Typical output power is up to 10mW CW, with Pulse Power up to 50mW.



KEY FEATURES

- Typical Narrow Linewidth < 200KHz (Coherence length>0.5km)
- Other Linewidth options <100KHz, <50KHz, <3KHz
- Wavelengths offered around 1260nm, 1383nm, 1550nm, 1648nm, 1653nm and 1665nm.
- High power: CW up to 10mW, Pulse up to 50mW (10µs Pulse Width, 1% Duty cycle)
- Excellent RIN< -140 dB/Hz (for power >10mW)
- Excellent typical SMSR: 50 dB
- Wavelength stability: ±1 pm
- Typical PER: 18 dB
- Direct Intensity Modulation up to 600Mbps
- Telcordia qualified

APPLICATIONS

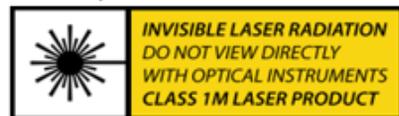
- Distributed temperature sensing
- Gas Detection
- Fiber Laser seeding for LIDAR
- Optical Time-Domain Reflectometer (OTDR)
- Cavity Ring Down Spectroscopy
- Microwave generation by beat- note signal

Notes:

1. Laser driver and temperature controller available with ISB6 module
2. Wavelength can be tuned thermally ~20pm/ Degree C and current ~0.2pm/mA



Fibre-Coupled Products



#DAY-OSE6-PB_2025_01_01

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