

# Ultra-Narrow Linewidth Laser

Single Frequency Laser in 14-pin BTF/DIL package





14-pin BTF

## **FEATURES**

- Narrow linewidth laser with FBG stabilized wavelength
- Selection of lasing wavelength from 1260nm to 1670nm
- High CW power up to 10mW
- High pulsed power stability

#### PRODUCT OFFERINGS

- A selection of wavelength are currently available for immediate evaluation
- DenseLight offers rapid turnaround prototyping to meet your specific needs
- Customizable performance items include
  - Lasing wavelength
  - Lasing linewidth
  - Output optical power level (CW or Pulse)
  - Direct modulation speed (standard or high)
  - SMF output pigtail or all-PMF laser design
- Ability to ramp to high volume
- Fast and responsive customer support

### **APPLICATIONS**

- B-OTDR Sensing and Strain Monitoring (Brillouin Optical Time Domain Reflectometry)
- Optical Metrology and Instrumentation
- Optical Gas and Chemical Sensing



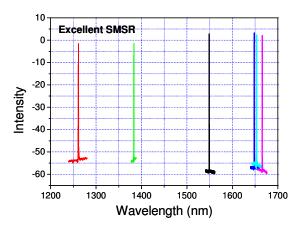


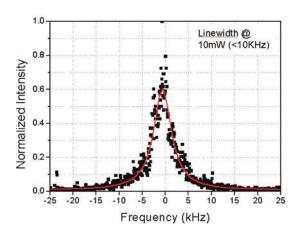
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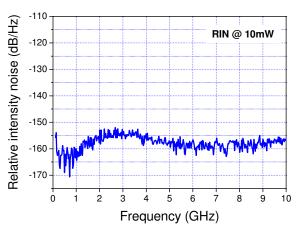
## Ultra-Narrow Linewidth Laser Modules in 14 pin Butterfly or 14 pin DIL

#### **Product Description**

DenseLight DL-CLS Series is a cooled ultra narrow linewidth laser in BTF/DIL package with a single frequency emission. This laser 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 SMSR. The as-built lasing wavelength can be specified precisely to 1nm, and further precision (down to picometer range) can be achieved through minor tuning in the internal cooler temperature or drive current. The device can be intensity modulated up to 622Mbps. High speed frequency modulation can be achieved by directly modulating its drive current. Typical output power is up to 10mW CW, with pulsed power up to 50mW. Higher output power are available on custom models.







# Currently available wavelengths (please check with factory for the latest list)

Peak Wavelength (nm)	Product Code	Operating Condition	Minimum Power (mW)	Typical Spectrum Linewidth (kHz)	SMSR	Packaging Option
1260	DL-CLS051B/D-S1260	CW	5	10	45	BTF/DIL
	DL-CLS309B/D-S1260	Pulse	30	10	45	BTF/DIL
1383	DL-CLS051B/D-S1383	CW	5	10	45	BTF/DIL
	DL-CLS409B/D-S1383	Pulse	40	10	45	BTF/DIL
1550	DL-CLS101B-S1550	CW	10	10	45	BTF
	DL-CLS101B-FP-S1550	CW	10	10	45	BTF
	DL-CLS509B-S1550	Pulse	50	10	45	BTF
1648	DL-CLS051B/D-S1648	CW	5	10	45	BTF/DIL
	DL-CLS259B-S1648	Pulse	25	10	45	BTF
1653	DL-CLS081B-S1653	CW	8	10	45	BTF
1665	DL-CLS051B-S1665	cw	5	10	45	BTF

