

SLD-2B



DEVICE

Super Luminescent Diode, Benchtop

OVERVIEW

The Optilab SLD-2-B are Super Luminescent Light Emitting Diodes (SLED) based broadband light sources, designed for general laboratory applications. The SLD-2-B is a reliable and cost-effective benchtop unit that can accommodate up to two broadband SLED sources and can be ordered from a wide array of SLD with different wavelengths, bandwidth, and power levels. The SLED operating temperature and drive current are precisely monitored by micro-controller to ensure constant output power and emission wavelength stability. With its simple and intuitive front panel interface, the user can control the SLED source output power level by adjusting the drive current, and the optional pulsed operation mode can enable optical pulse of 10 ns rise time. Contact Optilab for more information.

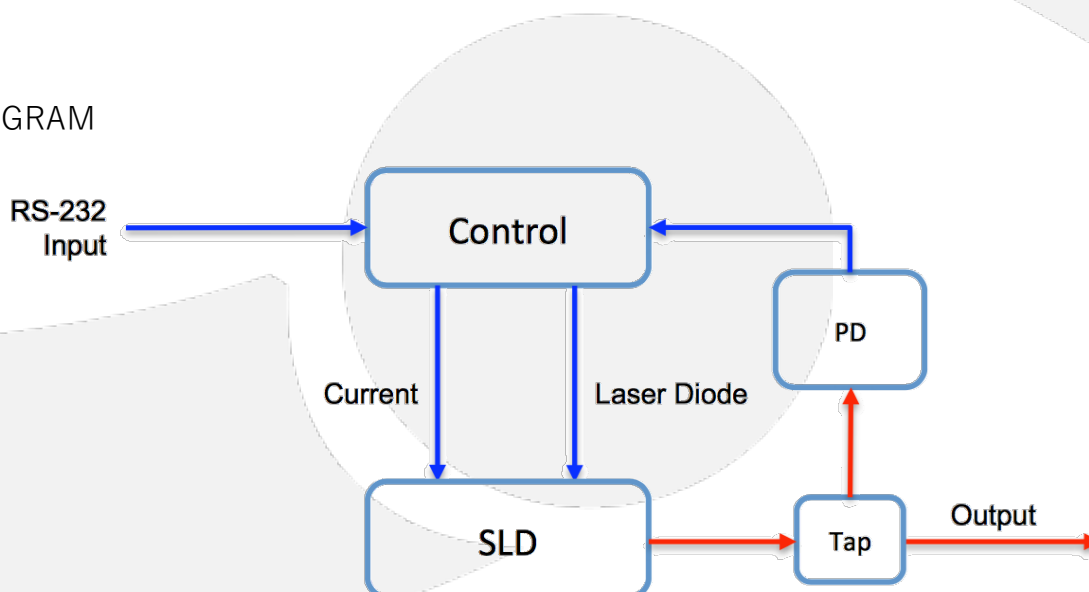
FEATURES

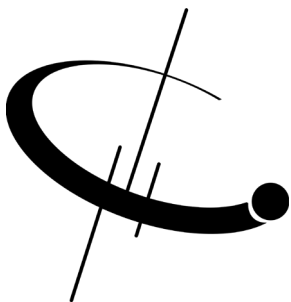
- Optional pulsed-operation w/ rise time of 10 ns
- Wavelengths from 670 nm - 1610 nm
- Minimal ripple in emission spectrum
- 1 year warranty
- Optical isolator upon request
- Up to two SLEDs in one unit
- Monitoring and current control

USE IN

- DWDM Component Characterization
- Fiber Optic Sensing
- Optical Tomography
- Optical Gyroscope

FUNCTIONAL DIAGRAM





SLD-2B

SPECIFICATIONS

Number of SLED Sources	Up to 4 SLED in one unit
Available Wavelengths	670 nm to 1610 nm
Output Power	2 mW
SLED Control	Bias current and TEC temperature
Output Power Stability	± 0.1 dB over 8 hours
Spectral Ripple	5% typ.
Wavelength Stability	± 0.1 nm over 8 hours
Modulation Rise Time (optional)	10 ns typ.
Narrow Laser Linewidth	< 1 MHz DFB Available
Side Mode Suppression Ratio	45 dB typ.
Optical Isolator	30 dB min.
Relative Intensity Noise	-145 dB/Hz max.
Polarization Extinction Ratio	20 dB typ. (with PM fiber Option)

GENERAL

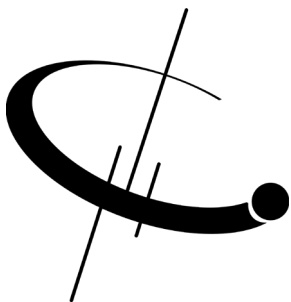
ADJUSTABLE FEATURES/RANGES

Channel Output Control	On/Off
SLED Drive Current	Up to 10 dB adjustment of peak power output

MECHANICAL

Operating Temperature	10°C to +50°C
Storage Temperature	-10°C to +70°C
Operating Humidity	0% - 85% Relative Humidity
Power Supply	80 - 240 V, 43 - 63 Hz AC or 40- 58 V DC (optional)
Power Consumption	60 W max.
Housing Dimensions	Benchtop, 16.5" x 12.5" x 5.25"
Control/Monitoring	SLED Current, Output Power
Remote Control	RS-232 via DB-9 Connector
Display	SLED Current, Output Power
Optical Connectors	FC/APC, FC/UPC, SC/APC, SC/UPC, PM FC/APC, PM FC/UPC
Optical Fiber Type	Single Mode, PANDA for PM Output





SLD-2B

ORDERING OPTIONS

SLD-2B-xx-yyyy-z

- xx** Optical Power Level (mW)
- yyyy** Center Wavelength (nm)
- z** M, Pulse Modulation Mode; I, Isolator

SPECTRUM GRAPH AT 1050 NM

