

# Super Luminescent Diode, Benchtop

The Optilab SLD-2B series is a line of Superluminescent Light Emitting Diodes (SLED) based broadband light sources, designed for general laboratory applications.

SLD-2B Super Luminescent Diode, Benchtop



## PRODUCT SPECIFICATIONS

### Technical Specifications

Number of SLED Source	Up to 2 SLED in one unit
SLED control	Bias current and TEC temperature
Output Power Stability	$\pm 0.1$ dB over 8 hours
Spectral Ripple	5% typ.
Wavelength Stability	$\pm 0.1$ nm over 8 hours
Modulation Rise Time (Optional)	10 ns typ.

### Adjustable Features and Ranges

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

## Product Description

The Optilab SLD-2B is a line of Superluminescent Light Emitting Diodes (SLED) based broadband light sources, designed for general laboratory applications. The SLD-2B 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. The optional pulsed operation mode can enable optical pulse of 10 ns rise time.

## Features

- Up to two SLEDs in one unit
- Minimal ripple in emission spectrum
- Optional pulsed operation with rise time of 10 ns.
- Available wavelengths from 670 nm to 1610 nm
- Front panel monitoring and current control
- Available connectors: FC/APC, FC/UPC
- Optical isolator upon request
- Two year limited warranty

## Ordering Information

### SLD - xx - yyyy - z

xx: Optical Power Level (mW)

yyyy: Center Wavelength (nm)

z: Option Code

M: Pulse Modulation Mode

I: Isolator



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Product specifications and description are subject to change without notice.  
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## Additional Information

All Optilab SLD-2B products are backed by a industry leading two year limited warranty on ensure system functionality. Our customer service team provides technical support for any inquires for the operation of the SLD-2B products.

## Specifications of Available SLED Models

Center Wavelength	Spectral Width	Ouput Power	Features	Model Number
680 nm ±10 nm	10 nm min.	1 mW	With TEC	SLD-2B-1-680
760 nm ±10 nm	10 nm min.	2 mW	With TEC	SLD-2B-2-760
787.5 nm ±7.5 nm	13 nm min.	2 mW	With TEC	SLD-2B-2-787.5
795 nm ±15 nm	30 nm min.	2 mW	With TEC	SLD-2B-2-795
830 nm ±10 nm	22 nm min.	1 mW	With TEC	SLD-2B-1-830
830 nm ±10 nm	22 nm min.	2 mW	With TEC	SLD-2B-2-830
840 nm ±10 nm	18 nm min.	5 mW	With TEC	SLD-2B-5-840
880 nm ±10 nm	20 nm min.	2 mW	With TEC	SLD-2B-2-880
910 nm ±20 nm	45 nm min.	2 mW	With TEC	SLD-2B-2-910
975 nm ±15 nm	35 nm min.	2 mW	With TEC	SLD-2B-2-975
1020 nm ±10 nm	30 nm min.	1.5 mW	With TEC	SLD-2B-1.5-1020
1050 nm ±10 nm	35 nm min.	1.5 mW	With TEC	SLD-2B-1.5-1050
1310 nm ±10 nm	35 nm min.	1.5 mW	With TEC	SLD-2B-1.5-1310
1310 nm ±10 nm	20 nm min.	5 mW	With TEC	SLD-2B-5-1310
1535 nm ±25 nm	35 nm min.	1 mW	With TEC	SLD-2B-1-1535
1535 nm ±25 nm	50 nm min.	15 mW	With TEC	SLD-2B-15-1535
1625 nm ±15 nm	35 nm min.	2 mW	With TEC	SLD-2B-2-1625

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### Mechanical Specifications

Temperature Range	10° C to +50° C (operating), -10° C to +70° C (storage)
Operating Humidity	0% to 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	SMF-28 (Standard), PANDA for PM Output
Housing	Solid Cast Aluminum



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