

OFLS-B Series

DATASHEET

DESCRIPTION



Safibra's SLEDs (Superluminescent Light Emitting Diodes) are of Light Emitting Diodes (semiconductor light sources that merge the best features LEDs and semiconductor lasers. The SLEDs provide broadband output optical spectrum and low temporal coherence typical of LEDs, with high output power levels and high spatial coherence typical of semiconductor lasers.

SAFIBRA offers a wide range of standard SLED sources with different wavelengths ranging from 650 to 1600 nm, with different power and

bandwidth values according to customer's need.

Optical sources are provided in two various packaging according to their cooling. Cooled version includes TEC (thermo electrical cooler) inside to stabilize SLEDs temperature.

In addition to standard products, SAFIBRA can also offer devices with custom performance and custom housing/ solutions. Our diverse portfolio of SLEDs provides our customers with a wide variety of choices, when determining the optimal SLED for their application.

Optical source can be controlled via front panel buttons or USB interface. The SW user friendly interface enables to control and monitor light source parameters.

The OFLS-B series are universal optical light sources optimal for fiber optic sensor applications, telecommunication, instrumentation, fiber optic gyroscopes and medical imaging applications.

Particularly the light source could be applied in research field, where experiments under specific conditions are performed. Thanks competitive pricing is also suitable for teaching and learning purpose especially in fiber optics and optoelectronics labs at university institutions.

FEATURES

- ✓ Broad range of wavelength: 650 to 1600nm
- ✓ Broadband Optical Emissions: FWHM up to 120nm
- ✓ High Optical Power: up to 30mW (from the fiber)
- ✓ Low Spectral Modulation (Ripple)
- ✓ Short Coherence Lengths (Low Temporal Coherence)
- ✓ High Spatial Coherence
- ✓ External modulation

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FEATURES

- ✓ Fiber optic component testing
 - ✓ Optical channel monitors (DWDM, OCM, and OPM)
 - ✓ Chromatic & Polarization mode dispersion
 - ✓ Passive component characterization
- ✓ Fiber optic sensor
 - ✓ Civil structure monitoring (Bridges, tunnels,...)
 - ✓ Atomic Force microscopy
 - ✓ Temperature, strain, pressure, el. power measurement
- ✓ Navigation / Fiber optic gyroscopes
 - ✓ Avionics
 - ✓ Aerospace
 - ✓ Navigation
- ✓ Medical imaging
 - ✓ Optical coherence tomography
 - ✓ Confocal microscopy
 - ✓ Endoscopy, Cardiovascular & Gastrointestinal
 - ✓ Cornea & Retina diagnostics

SPECIFICATIONS

Parameter	Value
Storage temperature range	-20°C to +60°C
Operation temperature range	-5°C to +35°C
Dimensions	35 x 84 x 166 mm ³ (version with external diode cooling) 44 x 115 x 160 mm ³ (cooled version)
Power supply	AC 230V / DC 9V
Operation mode	CW / internal modulation (1kHz) external modulation (max. 10 kHz)
Optical output	FC/APC connector other connectors on request

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LIST OF SOURCES

Part number / optical parameters	Central wavelength [nm]	Optical power [mW]	FWMH [nm]	Remarks
OFLS-B-65-03-06-C	650±20	3,0	6	
OFLS-B-75-02-20-U	750±20	2,0	20	external diode cooling
OFLS-B-79-05-25-C	790±20	5,0	25	
OFLS-B-82-02-20-U	820±20	2,0	25	external diode cooling
OFLS-B-83-10-20-C	830±20	10,0	20	
OFLS-B-84-02-50-U	840±20	2,0	50	external diode cooling
OFLS-B-84-05-50-C	840±20	5,0	50	
OFLS-B-85-05-55-C	850±20	5,0	55	
OFLS-B-88-05-65-C	880±20	5,0	65	
OFLS-B-15-10-70-C	1050±20	10,0	70	
OFLS-B-15-20-60-C	1050±20	20,0	60	
OFLS-B-16-20-70-C	1060±20	20,0	70	
OFLS-B-17-10-90-C	1070±20	10	90	
OFLS-B-23-10-45-C	1230±20	10,0	45	
OFLS-B-27-25-30-C	1270±20	25,0	30	
OFLS-B-30-01-60-C	1300±20	1,5	60	
OFLS-B-30-05-120-C	1300±20	5,0	120	
OFLS-B-30-15-70-C	1300±20	15,0	70	
OFLS-B-30-20-45-C	1300±20	20,0	45	
OFLS-B-31-03-40-U	1310±20	3,0	40	external diode cooling
OFLS-B-31-10-40-C	1310±20	10,0	40	
OFLS-B-31-10-100-C	1310±20	10,0	100	
OFLS-B-31-30-60-C	1310±20	30,0	60	
OFLS-B-35-20-55-C	1350±20	20,0	55	
OFLS-B-38-10-40-C	1380±20	10,0	40	
OFLS-B-48-02-60-C	1480±20	2,0	60	
OFLS-B-48-15-40-C	1480±20	15,0	40	
OFLS-B-52-02-60-U	1520±20	2,0	60	external diode cooling
OFLS-B-52-02-60-C	1520±20	2,0	60	
OFLS-B-52-08-60-C	1520±20	8,0	60	
OFLS-B-54-10-60-C	1540±20	10,0	60	
OFLS-B-55-02-60-U	1550±20	2,0	60	external diode cooling
OFLS-B-55-05-60-C	1550±20	5,0	60	
OFLS-B-55-10-100-C	1550±20	10,0	100	
OFLS-B-55-15-45-C	1550±20	15,0	45	
OFLS-B-55-20-60-C	1550±20	20,0	60	
OFLS-B-57-10-65-C	1570±20	10,0	65	
OFLS-B-58-20-60-C	1580±20	20,0	60	
OFLS-B-60-01-90-C	1600±20	1,0	90	