

### Product 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 750 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 operated in **continual mode** (CW) and it could be also modulated – **internally** by 1 kHz or **externally** by 0-10 kHz (TTL).

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: **700 to 1600nm**
- Broadband Optical Emissions: FWHM **up to 90nm**
- High Optical Power: **up to 30mW** (from the fiber)
- Low Spectral Modulation (Ripple)
- Short Coherence Lengths (Low Temporal Coherence)
- High Spatial Coherence
- External modulation

### Applications:

#### **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