

SUPERLUM is the industry leading manufacturer of state-of-theart, ultimate quality superluminescent diodes and light sources, semiconductor optical amplifiers and tuneable swept lasers

## SLD-mCS/sCS-series Miniature Broadband Light Source Modules

SLD-mCS/sCS-series Miniature Broadband Light Source Modules are wide spectrum SM- or PM-fiber coupled light source modules for applications requiring a reliable, powerful, stable and low-noise SLD light source with a wide and flat spectrum and a short coherence length. A high-precision current and temperature controller powers the SLD module inside the light source. The SLD can be modulated (ON/OFF) at up to 50 kHz in both SLD-mCS and SLD-sCS light source modules.

**SLD-mCS/sCS devices can be built using any SUPERLUM SLD if its drive current is less than 400 mA.** They may be powered by a wide range of supply voltages, from 9 V to 30 V DC, and allow the use of switched-mode DC power supplies.

The **SLD-sCS** has a little bigger chassis (95 x 155 x 29 mm). This allows to add (on request) additional internal protection and laser safety measures, such as optical power overshoot protection, and others. The SLD-sCS has an FC/APC mating sleeve. An FC/APC to FC/APC 1-meter-long 0.9-mm buffered fiber cable is enclosed to the SLD-sCS. Additional small-size fiber-optic components can be integrated into SLD-sCS on request.

Similar to laser diodes, SLDs are extremely sensitive to driving. One-year warranty covering all SLD supply issues is provided when Superlum SLDs are delivered integrated with mCS/sCS controllers. Warranty may be extended upon request to up to 3 years/25,000 h (operation) for certain SLD models.



## **Features**

- Compact design (80 x 110 x 26 mm)
- Up to 400 mA SLD drive current
- Wide range of supply voltage levels (9-30 V DC)
- External or internal control of SLD power
- Automatic Current Control (ACC) mode
- Automatic Power Control (APC) mode
- 50 kHz modulation (ON/OFF)
- 0... +50 °C operating temperature range (can be extended to -40... +85 °C)
- High stability, low noise



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