



## SL001-SW (420-760nm)

Low power, compact,  
low settling time LED light source  
(Preliminary data)



The SL001 is a compact, low power, high stability and low settling time LED light source. It features a modular construction, using user replaceable LED modules, allowing different wavelength setups.

With an extremely short heating time of 1 minute, it is possible to get below 0,25% of stability at low drive currents.

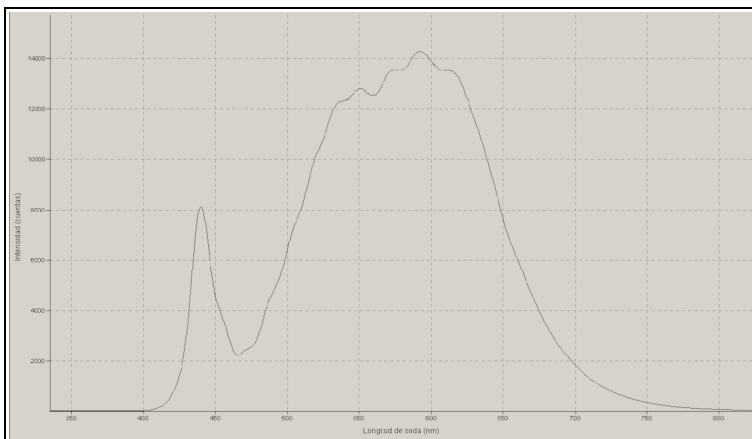
When compared with traditional halogen light sources, the SL001 provides up to an order of magnitude of lower power consumption with a virtually unlimited bulb life (>10.000 hours) and does not require a fan.

The SL001 can be operated from 9 to 18Vdc, with LED currents as high as 350mA.

The SL001 includes an electronic shutter controlled by a 5V TTL signal or a dry contact and can be operated at frequencies up to 1Khz.

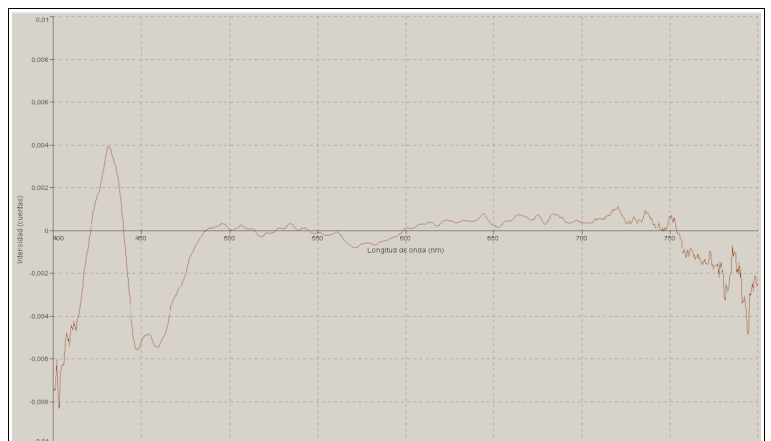
The light intensity can be adjusted linearly through the multi turn miniature potentiometer included in the electronic controller and the spectrum can be balanced inserting optical filters into the filter holder.

The SL001-SW is equipped with a SLM-SW led module covering the 420-760nm range



Left: Spectrum of the SLM-SW module with 100mA led drive current

Right: One hour Absorbance drift with 100mA led drive current and one minute warming time



## SL001 Electrical specifications

Operating supply voltage	9 – 18 Vcc
Supply voltage absolute maximum rating	20 Vcc
Led supply current (potentiometer controlled)	100 - 350mA
12V Power consumption input, 100mA Led drive	0,65 W
12V Power consumption input, 350mA Led drive	2,2 W
Electronic shutter control signal	5V TTL / Dry Contact (Open=led on, Short=led off)
Max shutter speed with 50% duty cycle control signal	100 Hz
Max shutter speed using duty cycle compensation	1 KHz

## SL001-SW General Optical Specifications

Spectrum range	420-760 nm
Luminous flux @ 100mA	33 lm
Luminous flux @ 350mA	100 lm
Maximum peak	590nm

## SL001-SW Optical Specifications @ 100mA led drive after 1 minute warm up

Stability	<0,25%
Drift with ambient temperature	<0,025% / °C
1h Absorbance drift (420-760nm)	< 8 mAU ( within ± 5°C ambient temperature variation)

## Mechanical specifications

Overall Size:	125x40x40 mm (length x height x width)
Weight:	205 g

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