

UV, Visible, NIR, and Broadband LED Light Sources



LED Light Sources



The LSM LEDs are controlled by the LDC-1 single channel driver and controller. This controller is required for LED operation.

LSM series LED light sources are ideal for fluorescence excitation and other measurements requiring narrowband illumination. The innovative optical design of the LSM LED family provides highly efficient coupling into an optical fiber, ensuring high power for fluorescence excitation where every photon counts.

LSM LEDs are available in discrete wavelengths ranging from 310-880 nm and in a warm white option with color temperature of 3000K. LSM LEDs accommodate multiple mounting options (DIN rail, optical bench, rack) and are supplied with a rugged plastic case for carrying multiple LEDs and accessories.

PRODUCT OVERVIEW

Efficient LSM LED Optical Coupling

Innovative optical design ensuring high power for excitation

Adaptable

Easy to mount in different environments

Contact our technical sales team to learn more about how our light source solutions can meet your spectroscopy requirements.

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Bringing quality
into focus

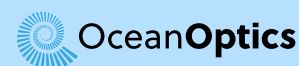
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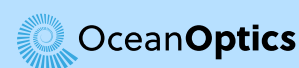
Specifications	UV LEDs	Visible LEDs	NIR LED	Broadband LED
Wavelength Range	310; 365; 385 nm	405; 470; 533; 635 nm	880 nm	Warm White
Source	LED	LED	LED	LED
Typical Output Power	0.21; 10.08; 15.95 mW	10.26; 3.15; 1.96; 2.68 mW	0.84 mW	6.41 mW
CWL (nm) Nominal	310; 365; 385	405; 470; 533; 635	880	3000K
CWL (nm) Typical	312; 371; 388	414; 461; 528; 628	870	NA
FWHM (nm)	16; 12; 12	17; 18; 36; 14	44	NA
Maximum Drive Current – CW	350 mA; 1400 mA; 1400 mA	1000 mA; 350 mA; 350 mA; 350 mA	350 mA	700 mA
Maximum Drive Current (Pulsed)	350 mA; 2000 mA; 2000 mA	1300 mA; 1000 mA; 1000 mA, 1000 mA	1000 mA	1000 mA
Pulse Power	0.23; 14.28; 20.55	16; 7.23; 4.08; 7.55	2.41	9.99
Safety & Regulatory	CE	CE	CE	CE
Operating Humidity	≤ 85% Relative humidity non-condensing	≤ 85% Relative humidity non-condensing	≤ 85% Relative humidity non-condensing	≤ 85% Relative humidity non-condensing
Operating Temperature	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C	0 °C to 50 °C
Fiber Connector	SMA 905	SMA 905	SMA 905	SMA 905
Dimensions	3 x 6.4 x 3.3 cm	3 x 6.4 x 3.3 cm	3 x 6.4 x 3.3 cm	3 x 6.4 x 3.3 cm
Weight	120 g	120 g	120 g	120 g
Power Consumption	2A (maximum)	2A (maximum)	2A (maximum)	2A (maximum)

Contact our technical sales team to learn more about how our light source solutions can meet your spectroscopy requirements.

LED Single-Channel



LDC-1



Ocean Optics LSM LEDs operate via the LDC-1 single-channel driver and controller, which enable basic programming. Proprietary electronics provide stable, high-current operation in continuous, pulsed and modulation modes. The LDC-1 enables LED control from an external source, such as a function generator or a trigger signal from a spectrometer or other electronic device.

In the LSM LED internal modulation mode, users can select continuous sine, triangle or square waveforms, and optimize LED frequency. These functions are useful for applications such as quality analysis and testing of commercial phosphors.

PRODUCT OVERVIEW

Compact	Single-channel driver and controller with color LCD touch screen
Robust Electronics	Proprietary design provides stable, high-current operation in continuous, pulsed and modulation modes
External Trigger Option	Enables LED control using a function generator or trigger/modulation signal

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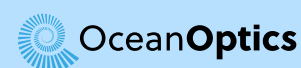
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LED Single-Channel



LDC-1



Specifications	LDC-1
Safety & Regulatory	CE
Operating Humidity Specification	≤ 85% Relative humidity non-condensing
Operating Temperature	0 °C – 50 °C
Dimensions	14.7 x 7.3 x 8.9 cm
Weight	800 g
Power Consumption	2A (maximum) at 15 VDC
Power Requirements	15 VDC power supply 30W MAX
Fiber Connector	SMA 905

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