Ocean Insight

# LSM Series High-Power LEDs


## UV-Shortwave NIR LEDs for Fluorescence Excitation and More

LSM LEDs are ideal for fluorescence excitation and other spectroscopy measurements. The LEDs are available in discrete wavelengths ranging from 265-880 nm and in a warm white option with color temperature of 3689K.

LSM LEDs provide highly efficient coupling of LED light into an optical fiber, ensuring high signal output for applications across UV, Visible and Shortwave NIR wavelengths. The single-channel LDC-1 driver and controller unit enables simple LED programming and waveform display, and allows users to monitor characteristics such as LED power output and temperature.

ASK APPLIED SPECTRAL KNOWLEDGE

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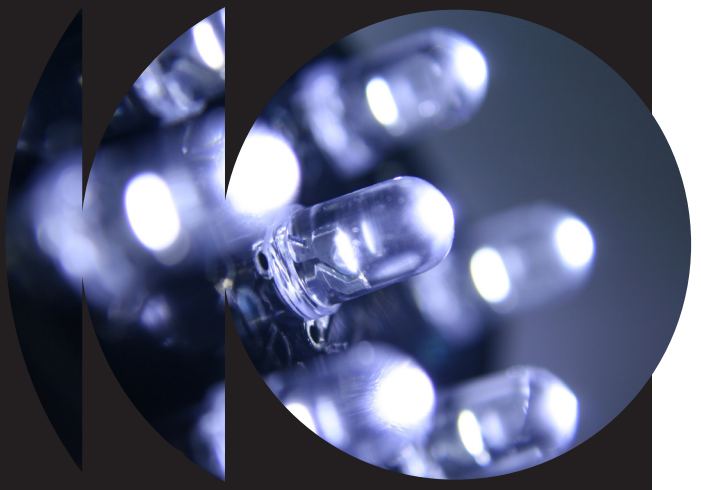

## At a Glance

### Driver and Controller

**Power consumption:** 2A (maximum) at 15 VDC
**Power requirements:** 15 VDC power supply, 30W maximum
**Display:** 3.5" 480 x 320 resolution color graphics display w/resistive touch screen
**Signal sources:** Internal DC
Internal Sine, Triangle and Square waves
**External Modulation Input:** 0-5V signal or driven with function generator
**Safety & regulatory:** CE

### LEDs

**UV wavelengths:** 265 nm, 280 nm, 310 nm, 365 nm
**Visible wavelengths:** 405 nm, 470 nm, 533 nm, 635 nm, 880 nm
**Broadband:** Warm White (3689k)
**Environmental conditions:** Temperature: 0° C to 50° C
**Humidity:** <85% (relative humidity, non-condensing)
**Altitude:** 0-3050 m (0-10,006 ft.)
**Safety & regulatory:** CE

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# Additional Advantages of LSM LEDs

With the LDC-1 single-channel driver and controller, users can select the appropriate power level to maintain LED thermal stability and maximize bulb life, or select a pulse mode with varying on/off times when an experiment requires this. Individual wavelengths can be changed by simply hot swapping the modules connected to the LDC controller.

In addition, the Internal Modulation Modes allow users to experiment with different waveforms and frequencies. These modulation techniques are useful for applications including the testing of commercial phosphors, which require time-resolved quality analysis of phosphorescent properties.