MLED4 Series Multi-Channel LED Light Source, 4 Channels, RS-232 Control

Model MLED4 Series · waveqvanta.com/products/mled4-series-multi-channel-led-light-source

Compact four-channel LED source with programmable exposure time and intensity for photocatalysis and life-science work.



The MLED4 series is a compact four-channel LED light source and driver for photocatalysis, UV analysis and life-science applications. Channel intensity is set by duty-cycle control, exposure time and intensity can be programmed, and the unit is operated manually, by digital on/off signal or over RS-232. Five driver versions combine 700 mA, 350 mA and 20 mA channels, and MLED-POST holders mount one to four LEDs.

Key features

- Four output channels; driver versions MLED4-1 to MLED4-5 with 20, 350 or 700 mA per channel
- Intensity adjustable 1–100% by duty cycle, 120 Hz modulation switching frequency
- Programmable exposure time up to 9999.9 s; manual control for long exposures
- Manual, digital signal (on/off) and RS-232 (on/off) control
- Compact, portable 1.5 kg unit for system integration; fan cooled
- Efficient electro-optical conversion for low energy use
- MLED-POST1 to MLED-POST4 holders fix 1 to 4 LEDs with adjustable height (up to 200 mm) and direction

Specifications

Channels	4 (CH1–CH4)
Channel Output Current	20, 350 or 700 mA, depending on model and channel
Intensity Adjustment	1–100%, duty-cycle control
Modulation Switching Frequency	120 Hz
Irradiation Time	Settable up to 9999.9 s; manual mode for long exposures
Control Modes	Manual, digital signal (on/off), RS-232 (on/off)
Cooling	Fan
Input Power	AC 110–220 V
Operating Temperature	+5 to +35 °C
Storage Temperature	−10 to +55 °C
Humidity	RH 20–80% (operating and storage)
Weight	1.5 kg
LED Holders	MLED-POST1/2/3/4 for 1/2/3/4 LEDs, height up to 200 mm, adjustable direction

Model overview

Model	CH1 (mA)	CH2 (mA)	CH3 (mA)	CH4 (mA)
MLED4-1	700	700	700	700
MLED4-2	20	700	700	700
MLED4-3	20	700	700	350
MLED4-4	20	700	350	350

Model	CH1 (mA)	CH2 (mA)	CH3 (mA)	CH4 (mA)
MLED4-5	20	20	350	350

Typical applications

- Photocatalysis
- UV analyzers
- Genetic engineering and molecular genetics
- Pharmaceutical and biological product research
- Health and epidemic prevention
- Dye, petrochemical and textile industry testing