

The LEDMOD Series



The LEDMOD Series - High Power Fiber Coupled LED Modules

The temperature-stabilized, high-power LED modules of the LEDMOD Series are intended for users in the industry, research and science sector. Applications in biotech, medical technology, microscopy, photo-catalysis and fluorescence excitation are only some of the applications in which these laboratory light sources are employed. The modules are available in many wavelengths, from deep UV (255 nm) to the infrared range (950 nm). The optional, highly-efficient fiber coupling, the integrated interface RS-232, the Windows™ compatible software for programming and control, and the diverse operating modes, make these modules flexible, compact and extremely long-lived source of light, which up to now could not to be realized with classical methods. The possibility of external analog and digital modulation, the programmability of an internal frequency PWM with variable duty-cycle and the controllability over the serial interface, enable adaptation of the source of light to nearly every application. The high optical output powers (particularly in the UV range at 365 nm, 385 nm and 405 nm) represent a long-lived alternative to UV discharge lamps. LEDMOD LED modules, with emission in the blue, green, yellow, red and infrared range, as well as a white light source, represent a genuine, wavelength-stable alternative source of light for halogen lamps. Reproducible results of measurement are thus guaranteed!

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Key Facts:

- Small and compact design
- Wavelengths between 255nm and 950nm available
- Optical output powers up to 300mW
- High efficiency fiber coupling into High NA fibers
- Analog and digital modulation up to 500kHz
- Programmable PWM function generator
- OEM and Laboratory style available
- Control Bus - control of multiple LEDMOD modules
- RS-232 Interface

Wavelength range: 255 - 950nm

Optical output power: up to 300mW

LEDMOD LAB Series - High Power LED modules with TEC cooling and optional fibre-coupling for laboratory use
 TEC-cooled High Power LED modules from 255 nm to 950 nm with optional fibre-coupling for laboratory use

LEDMOD OEM Series - High Power OEM LED modules with TEC cooling and optional fibre-coupling
 TEC-cooled OEM LED modules from 255 nm to 950 nm with optional fibre-coupling

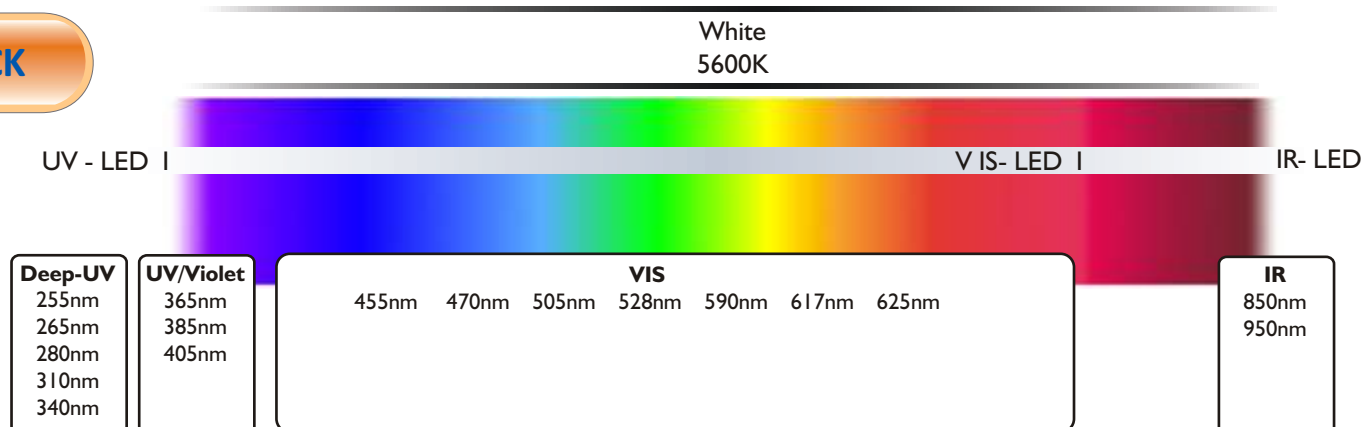
LEDMOD OEM / LAB

Wavelengths & Powers
 (other wavelengths and powers on request)

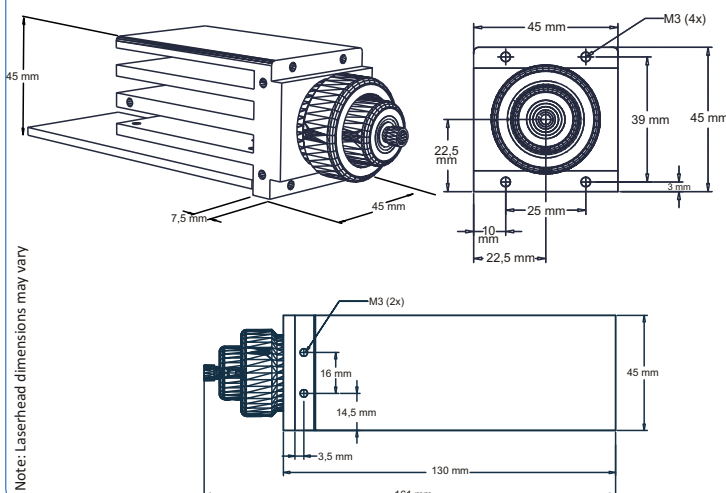
- Deep-UV:
- 255nm / 150µW
- 265nm / 400µW
- 280nm / 600µW
- 310nm / 500µW
- 340nm / 350µW
- UV / Violet:
- 365nm / 250mW
- 385nm / 300mW
- 405nm / 250mW
- VIS:
- 455nm / 300mW
- 470nm / 300mW
- 505nm / 50mW
- 528nm / 100mW
- 590nm / 100mW
- 617nm / 300mW
- 625nm / 200mW
- IR:
- 850nm / 170mW
- 950nm / 150mW
- White:
- 5600K / 200mW

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|--|--|
| Free emission angle | 120 - 130° (Deep-UV 10°) |
| Temperature control | active peltier cooling (TEC) |
| External modulation capabilities | up to 500kHz by analogue 0...5V signal and / or digital by TTL signal |
| Internal modulation capabilities | Up to 200kHz with programmable frequency and duty-cycle |
| Power setting resolution | internal: 12Bit external: analogue |
| Computer interface | RS-232 terminal communication, 57600 baud |
| Operation modes | 1.) external analogue control (0...5V) for output power and additional external TTL signal for ON/OFF modulation 2.) internal power control with external TTL for ON/OFF modulation 3.) internal power control CW (continues wave) operation (no external signals necessary) 4.) internal power control + programmable frequency and duty-cycle for ON/OFF modulation (no external signals necessary) 5.) external power control (0...5V) for output power + programmable frequency and duty-cycle for ON/OFF modulation |
| Control interface | 15-pin Sub-D connector |
| Dimensions (without fibre-coupling unit) | 51x49x150mm (HxBxL). |
| Weight | 350g |
| Supply voltage | 9VDC-15VDC |
| Power consumption | 27W max. < 1W in standby |
| Environmental temperature | 0°C-45°C |
| Certifications | CE, UL/CSA on request |
| Special features | * Modular mechanical and electronic principle * Control-bus architecture for control of multiple LED units * Interlock function * Over-TEMP protection * Remote-control |
| Options | * High-efficiency fibre coupling into high-NA POF and fused-silica fibres (e.g. 2mm / 70%, 1mm / 35%) |

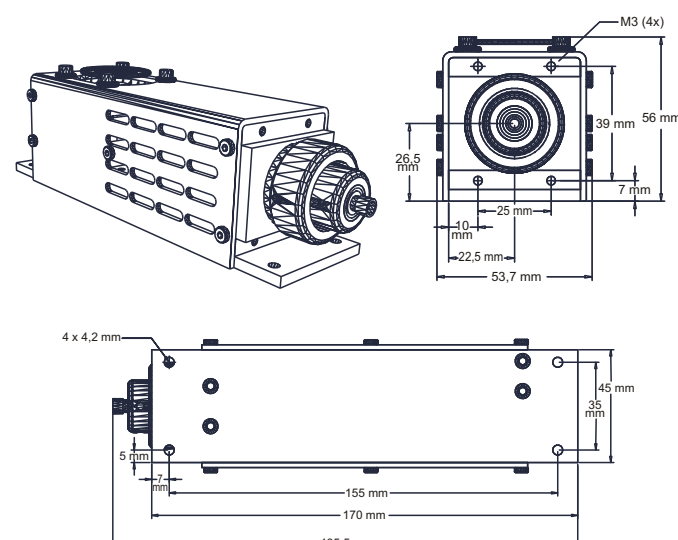
BACK



LEDMOD OEM



LEDMOD LAB



Note: Laserhead dimensions may vary

LEDMOD □□□ . □□□ . □□□
 Wavelength in nm Power in mW Model OEM or LAB