



Laser Diode Module CLD – MW Series

PRODUCT FEATURES

- ▲ USB controlled, instrumentation ready
- ▲ Full control touchscreen display operation
- ▲ Integrated laser and electronics in a single package
- ▲ Excellent power and wavelength stability

APPLICATIONS

- ▲ Bioanalytical
- ▲ Measurement & inspection

Hazard Note: This laser module emits radiation that is visible or invisible depending on wavelength and harmful to the human eye. When in use, do not look directly into the laser emitting aperture. Looking directly at laser diode emission at close range may cause eye damage.

Electrical Precaution: The case is internally connected to the circuit; damaging the anodized surface may result in failure of the laser module.



Warranty: One year. No warranty coverage for disassembly, modifications or damage due to abuse or misapplication.

SPECIFICATIONS

OPTICAL

Wavelength*	405 - 730 nm
Optical output power**	up to 50 mW
Laser power stability	< 0.5%
Laser RMS noise	< 0.5%
Polarization	> 100:1
Modulation	internal up to 1 MHz, external up to 20 MHz
Laser exit	FC connector (50 micron fiber)
Beam pointing stability	< ± 10 µrad
Warm-up time	20 s

ELECTRICAL

Operating voltage	3.3 VDC
Operating current	< 1.2 A
Control circuit	constant current

MECHANICAL

Dimension (W x H x L)	40 x 46.8 x 100 mm
Operating temperature	+ 10°C to +40°C***
Storage temperature	-40°C to + 80°C
Heat sink requirements	recommended for extended use

* Please contact us for your desired combination of either two or three wavelengths.

** Higher output power combinations upon request.

***Thermal management: The CLD-MW series laser system is designed to dissipate heat through its body. For proper cooling, do not restrict air circulation around the device. An additional heat sink should be used to maximize the performance of the laser system.

DESCRIPTION

CLD – MW is a user controlled laser with an integrated laser and control electronics in single compact package. The built-in touchscreen display controls and displays complete laser operating parameters.

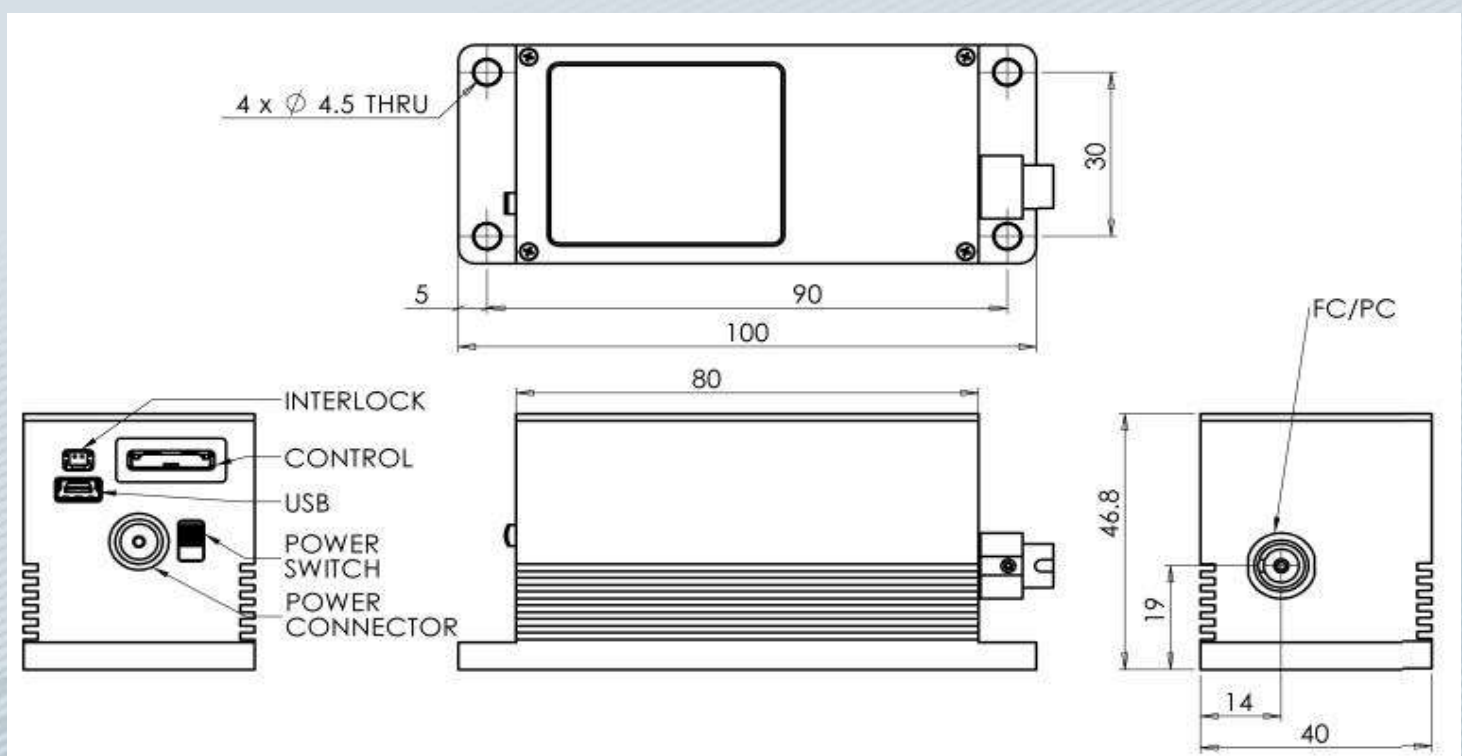
CLD – MW allows the user to set the laser power and temperature, scan the laser power and modulate the laser using a built-in internal functions generator up to 1 Mhz. External modulation is up to 20 Mhz.

CLD – MW demonstrates excellent beam quality, power stability, laser temperature control and low noise for demanding applications.

AVAILABLE WAVELENGTHS

405 nm	up to 100 mW
473 nm	up to 50 mW
488 nm	up to 50 mW
515 nm	up to 30 mW
520 nm	up to 60 mW
525 nm	up to 50 mW
633 nm	up to 70 mW
635 nm	up to 70 mW
637 nm	up to 50 mW
638 nm	up to 50 mW
642 nm	up to 50 mW
660 nm	up to 100 mW
670 nm	up to 10 mW
685 nm	up to 40 mW
705 nm	up to 30 mW
730 nm	up to 30 mW

MECHANICAL DIMENSIONS



CLD – MW SERIES ORDERING INFORMATION

You can choose two or three different wavelengths:

CLD-(λλλ-pppG-λλλ-pppG-λλλ-pppG)-MW

Option	Meaning	Value
λλλ	Wavelength	405 – 730 nm
ppp	Laser output power	up to 100 mW

Module with three wavelengths:

E.g. CLD-(638-20G-520-30G-473-40G)-MW: Laser module with 20 mW @ 638 nm, 30 mW @ 520 nm, 40 mW @ 473 nm and FC connector.

Module with two wavelengths:

E.g. CLD-(638-20G-520-30G)-MW: Laser module with 20 mW @ 638 nm, 30 mW @ 520 nm and FC connector.

CUSTOMIZATION OPTIONS

- ▲ Custom electronic drivers with firmware and software
- ▲ Mechanical design
- ▲ Other wavelengths