



Laser Diode Module LDH – Series – Blue

PRODUCT FEATURES

- ▲ Collimated or adjustable focus
- ▲ High stability and low noise
- ▲ Reverse polarity protection

APPLICATIONS

- ▲ Analytical and bio-instrumentation
- ▲ Flow cytometry
- ▲ Machine vision
- ▲ Sensing
- ▲ Automation

Hazard Note: This laser module emits radiation that is visible 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 nm
Optical output power	1.5 – 40 mW
Power stability	< 5%
Laser RMS noise	< 0.5%
Wavelength drift	0.2 nm/°C
Beam Size (1/e2)	adjustable or collimated (5mm)
Divergence at collimation	< 0.5 mrad
Laser structure	single mode laser
Pointing stability	< ± 50 µrad
Laser operation	CW or TTL (optional)

ELECTRICAL

Operating voltage	3.3 – 5 VDC
Operating current	< 160 mA
Control circuit	auto current control
Electrical connections	+red, -black

MECHANICAL

Dimensions (D x L)	12 x 51 mm
Cable	200 mm
Operating temperature	- 10°C to +50°C *
Storage temperature	-40°C to + 80°C
Heat sink requirements	recommended for extended use

*Thermal management: The LDH 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.

LDH SERIES ORDERING INFORMATION

LDH-λλλ-pppG-TTL

Option	Meaning	Value
λλλ	Wavelength	405 nm
ppp	Laser output power	1.5 – 40 mW
TTL	TTL modulation (optional)	on request

E.g. LDH-405-40G: Laser module with 405 nm and 40 mW.

CUSTOMIZATION OPTIONS

- ▲ Custom electronic drivers with firmware and software
- ▲ Mechanical design
- ▲ Fiber-coupled versions (multimode, single mode and polarization-preserving)
- ▲ Other wavelengths