

## Compact Laser Diode Driver For Laser Diodes, SLED and SOA devices

**Model no.: cLDD**



### Description

This compact Laser Diode Driver (cLDD) is a compact all-in-one unit designed for convenience of use, and combines a user interchangeable mount for a laser diode, SLED, SOA or similar device, a current driver and a TEC controller, all in a self-contained enclosure.

This product includes a USB port and a software control application with a graphical user interface (GUI) for real-time device monitoring, control and data logging.

The cLDD is used with either a 14-pin butterfly mount (provided with Type I, Type II and custom pin out routing boards) and/or a DIL mount. The mounts are user-interchangeable and are sold separately from the base unit.

Parameter	Specification			Unit
Control current range <sup>(1,2)</sup>	0.015 – 0.5	0.030 – 1.0	0.060 – 2.0	A
Current limit <sup>(1,2)</sup>	0.2 – 0.5	0.2 – 1.0	0.2 – 2.0	A
Current reading resolution	0.5	1.0	2.0	mA
Compliance voltage	> 4.8			VDC
Photodiode current range <sup>(1)</sup>	Five ranges from 5 to 5000 (selectable in the software control application)			µA
Maximum TEC current				
Constant regime	3.0			A
Transient regime	4.0			A
TEC current limit <sup>(1)</sup>	0.4 – 4.0			A
Modes of operation <sup>(1)</sup>	(a) Constant average current (b) Constant average output power (c) External modulation (bandwidth 500kHz@3dB for sinusoidal modulation)			- - -
Temperature control loop parameters (Proportional - $K_p$ , and Integral - $T_i$ ) <sup>(1)</sup>	Three ranges (selectable in the software control application)			-
External power supply	+5 VDC, 5A (included)			-
Power consumption	typ. <25			W
Dimensions (WxDxH)	135x200x54			mm
Computer controlled operation – via provided software control application				
Stand alone operation – via built-in keypad and display				
Built-in USB port – required for initial configuration and computer controlled operation				

(1) User configurable via Software Control Application (GUI)

(2) DIL mount is rated 1A continuous current

**Order Code:** **cLDD** – compact Laser Diode Driver (base unit only)  
Includes power supply module and software control application.

**BM** – Butterfly Mount (mount only)

**DM** – DIL Mount (mount only)

Note: The compact Laser Diode Driver base unit (Model cLDD) requires one of the above mounts (Model BM or DM) to be operational.