



ULDC-0100-MC



DEVICE

Universal Laser Diode Controller, for Coaxial Laser, 100 mA

OVERVIEW

The Optilab ULDC-0100-MC is a fully integrated Universal Laser Diode Controller designed for the coaxial laser diode. This compact, easy to use laser diode driver module operates under a single + 5 V DC power supply. ULDC-0100-MC comes with a built in OLED display and a USB port for external PC control. This driver is compatible with both type 1 and type 2 pinout by switching the pinout daughter boards. The laser diode can be driven in a range of 0-100mA with a setting resolution of 1 mA and the internal PD current can be monitored.

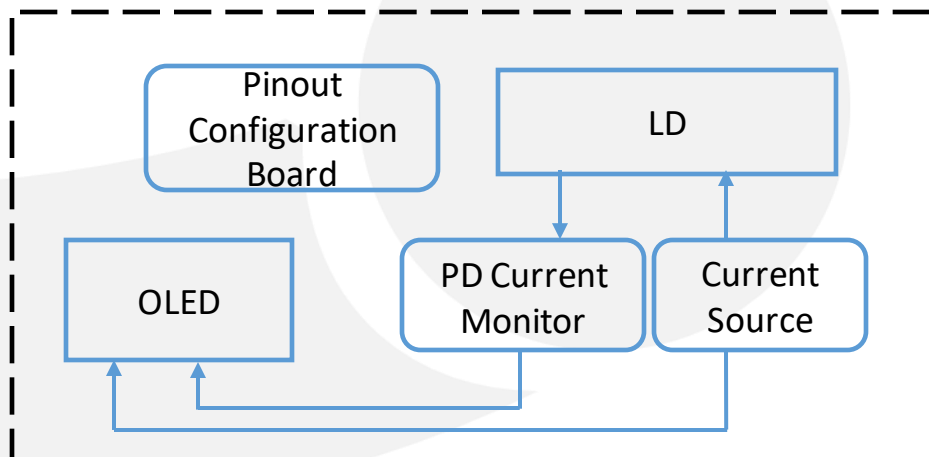
FEATURES

- Coaxial Socket with Magnetic Clip
- Up to 100 mA LD Current
- PD Current Monitor
- On Board OLED Display
- USB Port for External PC Control
- Compatible with Type 1 & 2 Pinout

USE IN

- Laser Diode Characterization
- Research and Development
- Laboratory Use
- Failure Analysis

FUNCTION DIAGRAM





ULDC-0100-MC

SPECIFICATIONS

GENERAL

Laser Diode Module Type	Coaxial / TO Package
LD Operation Mode	ACC
LD Drive Current Setting	1 ~ 100 mA
Current Setting Resolution	1 mA
LD Current Limit Setting	1 ~ 100 mA
LD Current Limit Setting Resolution	1 mA
Current Accuracy	+/- 1 + 0.1% mA
LD Max. Forward Voltage	3 V typ.
LD Voltage Meas. Resolution	0.001V
LD Voltage Display Resolution	0.01V
PD Current Measurement Range	0 ~ 9.99 mA
PD Current Meas. Resolution	1 μ A
PD Current Display Resolution	10 μ A
Power Supply Voltage	+5 VDC
Power Consumption	2.5 W max

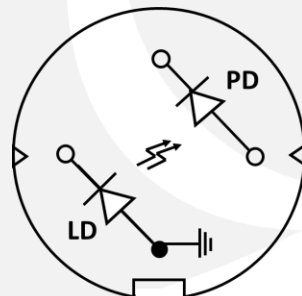
MECHANICAL

Operating Temperature	+5 °C to +35 °C
Storage Temperature	0 °C to +60 °C
Operating Humidity	0% to 85% Relative Humidity
Communication	USB / RS-485
Dimension	135 mm x 130 mm x 45 mm
Display	OLED
Cooling	Fanless

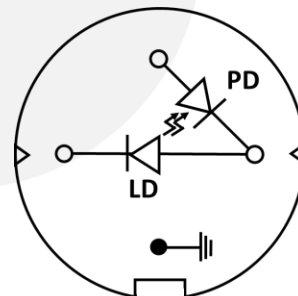
Compatible Laser Diode Pinout

Bottom View

Type 1



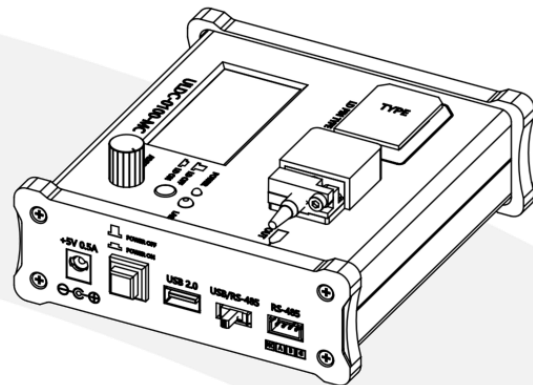
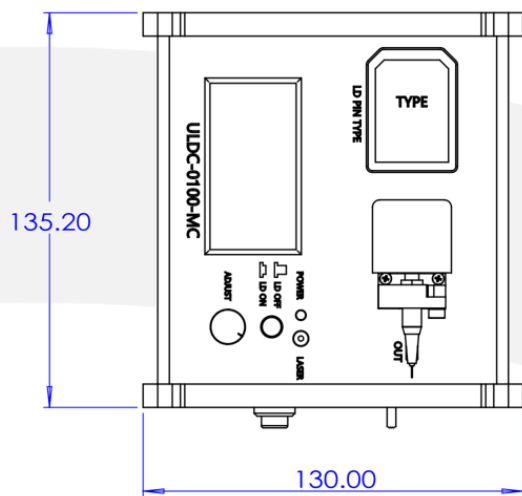
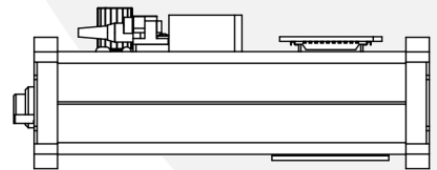
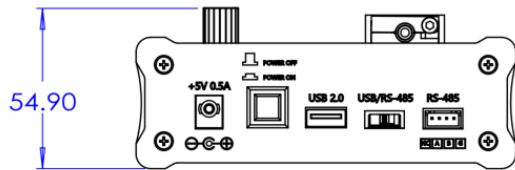
Type 2





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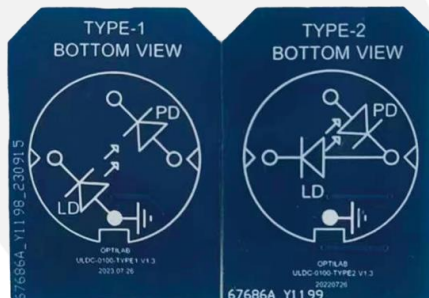
Mechanical Drawing (mm)



What's In the Package:

1. Universal Laser Diode Controller – 1
2. Daughter Board – (Type 1 and 2)
3. AC to 5VDC Adapter – 1
4. User's Manual

Pinout Daughter Board



Magnetic Clip Laser Mount

