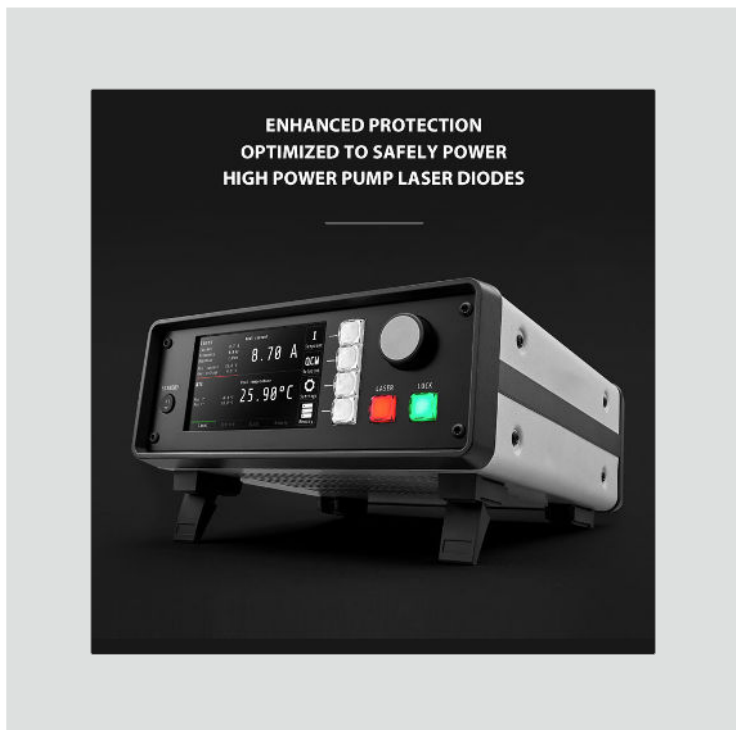


MBL1500A Benchtop Butterfly Laser Diode Controller



BUTTERFLY LASER DIODE CONTROLLER

- ◇ 1500mA Laser Driver + 16 Watt TEC
- ◇ User-Accessible, Internal Butterfly Laser Diode Mount with ZIF Socket
- ◇ Type-1 and Type-2 Compatible
- ◇ Fast Crowbar Circuit Protection
- ◇ Soft-Start Current Ramp, Current Limit, Reverse Voltage Protection
- ◇ NTC Thermistor Input for Laser Over-Temperature Fast Shut-Down
- ◇ GUI Control Software Included

Semiconductor Laser Sources and Control Instruments



1500mA Benchtop Laser Diode Controller with Integrated Butterfly Mounting Socket

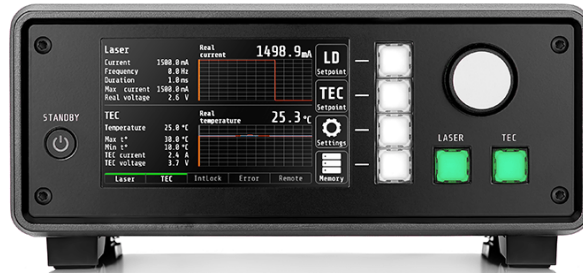
The MBL1500A series laser diode controllers are designed to precisely control laser diodes in 14-pin butterfly packages. These controllers support both Type 1 and Type 2 pin configurations of industry standard 14-pin butterfly packaged LD's. They include a high stability current source for biasing the laser diode, a TEC for precisely maintaining the temperature through a Peltier cooler (0.01 °C), and mount with an Azimuth ZIF socket for a butterfly packaged LD. These controllers are an excellent choice for laboratory test set-ups and have extensive protection features for safely controlling your laser diode. They are a great choice for safely and accurately controlling LD's from II-VI Laser Enterprise, Eblana Photonics, 3SP Technologies, Furukawa, Lumentum, and other manufacturers.

Multiple Integrated Laser Diode Protection Features

These controllers are designed to provide a series of protection features to ensure the safety of your laser diode. The module ships with a jumper which shunt the LD bias current path of the driver to protect the laser diode from any ESD / static discharges when a user is installing the diode into the mounting socket. This shunt also protects the laser when the user is connecting the DC power, the control connector or any other external equipment. An integrated reverse diode protects the laser diode from any possibility of damage from reverse current and reverse voltage. The user can set a current limit and temperature limit through the analog control connector port on through the on-board trim potentiometers. These controllers also offer a ~ 900 millisecond soft-start ramp to the current set point to avoid the potential for thermal shock to the laser.

Easy to Use Front-Panel Interface, USB Control

The MBL1500A benchtop Laser Diode Controller is operated via the convenient and easy-to-use front panel touch screen display. USB-control is included, as well as software with a graphical user interface.



Integrated 14-Pin
Butterfly Packaged Laser
Diode Mount





Set laser diode
current and
limit levels

Set CW or
QCW mode

Adjust
current

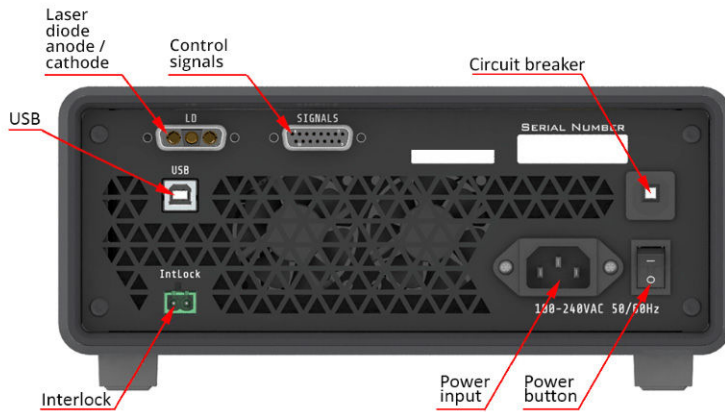


Set laser diode
temperature
limits

Laser diode
temperature
measurement

Turn laser
diode power
on/off

REAR PANEL





MBL1500A SPECIFICATIONS

CURRENT, VOLTAGE & TEC CONTROLLER

- Laser diode output current range (I): 0 - 1500.00 mA
- Compliance voltage maximum (V): 3 Volts
- Current setpoint resolution: 0.1 mA
- Current stability: 0.1 %
- Current setpoint accuracy: < +/- 1 %
- Output current noise (rms): < 15 μ A
- TEC output power: \pm 4 A
- TEC output voltage: \pm 4 V
- TEC output current ripple: 2 ~ 4 mA
- TEC Feedback Sensor: 10 kOhm NTC
- Temperature Control Range: +15 to +40 $^{\circ}$ C

LASER DIODE PROTECTION

- Soft-Start Current Ramp
- Current Protection
- Temperature Protection
- Reverse current protection
- ESD and transient protection

DIMENSIONS AND WEIGHT

- Dimensions: 257 x 271 x 116 mm
- Weight: 3.4 kg

USER INTERFACE

- Front Panel (Touch Screen or Buttons)
- USB

INPUT

- Universal AC Power Input 110VAC ~ 230 VAC, 50/60Hz

SHIPPING KIT (INCLUDED PARTS)

- Power cord – 1 pcs
- USB cable – 1 pcs
- Interlock connector – 1 pcs
- Datasheet & User Manual – 1 pcs

WARRANTY PERIOD

- 1-year manufacturer's warranty



H-SERIES GENERAL SPECIFICATIONS

PRODUCT WARRANTY:

This product is sold with a full one year warranty. The warranty includes all parts and labor. It is warranted to be free from defects in material and workmanship for a period of one year from the date of shipment. The warranty does not include damage to the product due to customer mishandling or use of the product outside of its specified maximum ratings.

INSTALLATION SUPPORT OR TECHNICAL SUPPORT FOR THIS PRODUCT:

800-887-5065 extension 1
contact@laserdiodesource.com



LASER DIODE
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