

LASER DIODE CONTROL ELECTRONICS AND MOUNTING MODULE – SF8300-ZIF14



ADVANCED PERFORMANCE HYBRID LASER DIODE CONTROL ELECTRONICS & MOUNTING MODULE

- ◇ An All-Inclusive Laser Diode Control Solution:
 - Low Noise Laser Diode Current Source
 - TEC Controller
 - Butterfly Package Laser Diode Mount

- ◇ Complete Protection for Your Laser Diode:
 - Soft-Start Current Ramp
 - User Set Current Limit
 - User Set Temperature Limit
 - Zener Diode to Shunt Power Surges

- ◇ On-Board Potentiometer Controls

- ◇ PC Control Through RS232 or USB

- ◇ Analog Control Signals Connector to Simplify Integration into a Laser System Product

- ◇ Free Control Software with GUI

Semiconductor Laser Sources and Control Instruments



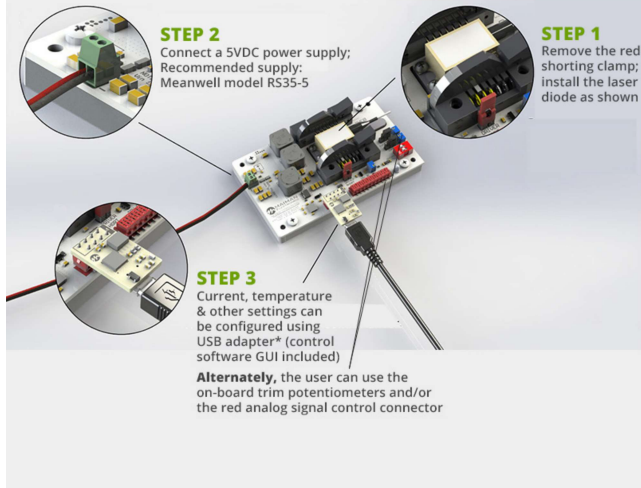
Product includes control software GUI for simple set-up and monitoring of your laser diode; alternately - you can use the trim pots on the board or the analog control connector



Software opens when you connect the USB adapter board; USB adapter board is included with shipment

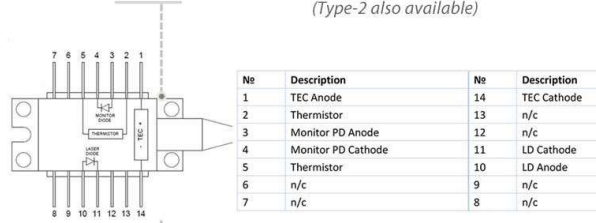
SET-UP DIAGRAM

Fast, simple 3 step set-up and operation

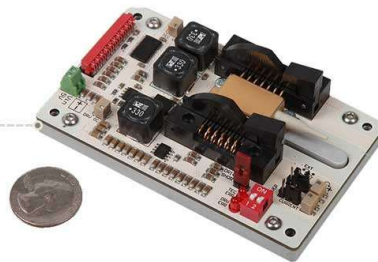




Standard product is configured
for **Type-1** Laser Diode Pin Configuration
(Type-2 also available)



Heat sink with mounting holes for simple attachment to optical table or instrument chassis



Recommended / Compatible DC Power Supplies Available to Purchase with this Control Electronics & Mount Module

Affordable General Purpose Switch Mode DC Power Supply:

Mean Well LRS-35-5 (5V, 7A)
Good choice for pump lasers (ie 808nm, 976nm, 980nm)



More Expensive Low Noise Linear DC Power Supply:

Condor HCS-6-OV-A+G (5V, 6A)
Linear supply for lower noise performance; best suited for single frequency laser diodes (ie DFB, DBR)





SF8300-ZIF14 SPECIFICATIONS (Including 3SP-SF8300-ZIF14)

CURRENT, VOLTAGE & TEC CONTROLLER

- Laser Diode Bias Output Current Range (I): 0 ~ 3,000 mA
- Laser Diode Bias Compliance voltage range (V): 3 V
- Current Stability: 0.1 %
- Current Set-Point Accuracy: < +/- 1 %
- Current Noise: 10-15 μ A
- TEC Output Current Range: 0 ~ \pm 4 A
- TEC Output Voltage Range:) 0 ~ \pm 4 V
- TEC Output Current Ripple: 2 ~ 4 mA
- TEC Feedback Sensor: 10 kOhm Thermistor
- Temperature Control Range: +15 to +40 °C

LASER DIODE PROTECTION

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

DIMENSIONS AND WEIGHT

- Dimensions: 101.6 x 61 x 28.3 mm
- Weight: 142 g

USER INTERFACE

- Trim Potentiometers for Driver Current and TEC Power
- Analog
- RS-232 / UART/ USB

POWER SUPPLY INPUT

- Input Voltage Supply (Vin): 5 VDC
- Recommended Linear / Switching Power Supply Options:
- Condor HC5-6-OV-A+G Linear Power Supply for better low-noise performance, narrow DFB laser line width
- Mean Well LRS-35-5, Switching Power Supply more economical; ideal for pump lasers

SHIPPING KIT (INCLUDED PARTS)

- SF8300
- 50 cm ribbon cable with one 8-pin connector – 1 pcs
- 50 cm ribbon cable with one 20-pin connector – 1 pcs
- Datasheet & User Manual – 1 pcs
- USB-UART converter – 1 pcs

WARRANTY PERIOD

- 1-year manufacturer's warranty



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
TECHNOLOGIES

Part of the Laser Lab Source Group:

LaserLabSource.com

LaserDiodeSource.com

LaserDiodeControl.com

Laser Diode Technologies

Laser Lab Source Inc.

1820 W. Lincoln Street

Bozeman, MT USA 59715

contact@LaserDiodeSource.com

contact@LaserDiodeControl.com

800-887-5065

800-887-5065