Complete LD/TEC Controllers with Mount

LD1300B

NEW products

LD1300D

The LDC1300 Series of Laser Diode Controllers combines a laser driver, thermoelectric cooler (TEC) controller, and either a butterfly or Dual in-line (DIL) mount into a compact package that can be controlled through an RS-232 interface. The controller is well suited for use with our Fabry-Perot Lasers, Superluminescent Diodes, Semiconductor Optical Amplifiers (SOAs), and Booster Optical Amplifiers (BOAs) that have an integrated TEC in a 14-pin butterfly or dual in-line package. The LDC drive board can deliver source currents up to 1 A and TEC currents of 2.5 A. The controller is adjusted for stable operation at 25 °C, assuming adequate heat sinking of the device. An LED indicator light is illuminated when the laser diode is enabled. The controller is also equipped with a monitor photodiode sensor that has an FC mating port that can be used to measure the output power of the device (in either dBm or mW).

ELECTRICAL PARAMETER	VALUE		
	MIN	TYP.	MAX
Supply Current	–	–	2.4 A
Supply Voltage	4.5 V	5.0 V	5.5 V
Drive Current	-	–	1000 mA
Drive Current Resolution	-	16 Bit	–
TEC Setpoint	10 °C	-	40 °C
TEC Step		0.1 °C	
Update Rate		3 Hz	
Operation Temperature		25 °C	
Dimensions	85 mm x 140 mm (3.35" x 5.51")		
COMPUTER INTERFACE			
Compatibility	Windows 95, 98, NT, 2000, or XP		
Interface	RS-232		

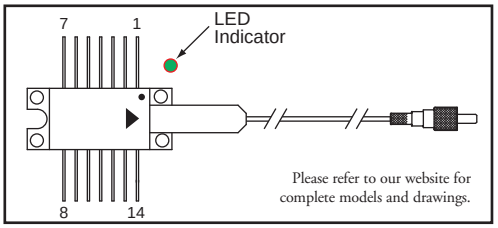
Features

- Laser Diode Driver Integrated with TEC Controller
- Choose from 14-Pin Butterfly or DIL Mount
- Controlled via RS-232 Interface
- Laser-Enabled LED Indicator
- Suited for use with BOAs, SOAs, SLDs, and FPLs

PC Software Interface

- Accurate Temperature and Current Control: Real-time temperature and current stability plots are displayed on the screen.
- TEC Safety Lockout Mechanism: Reduces the risk of damage by runaway heating due to improper TEC controller settings, incorrect TEC wiring, or inadequate heat sinking.
- Standalone Driver Configuration: Save the settings and the driver will boot up in this state every time power is applied.
- Optical Power - Voltage - Current Graphs: Can be viewed on screen or exported in .csv (comma separated value) format for use with other programs such as Microsoft Excel.

Pigtail PIN Orientation to Mount



Please note that the device is mounted on the LDC board such that the output of the device is oriented towards the LED on the LDC board.

PIN#	PIN-TO-CONNECTOR CONFIGURATION
1	TEC Anode
2	Thermistor
3	No Contact
4	No Contact
5	Thermistor
6	No Contact
7	No Contact
8	No Contact
9	No Contact
10	Device Anode
11	Device Cathode
12	No Contact
13	Case
14	TEC Cathode

ITEM#	$	£	€	RMB	DESCRIPTION
LDC1300B	$ 1,885.00	£ 1,306.50	€ 1.673,50	¥ 15,917.00	Laser Diode Controller for Butterfly Packages
LDC1300D	$ 1,885.00	£ 1,306.50	€ 1.673,50	¥ 15,917.00	Laser Diode Controller for DIL (Dual In-Line) Packages