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- Temperature/TEC Controllers

LD/TEC Controllers

LD/TEC Platforms

LD Mounts

LED Drivers

LED Mounts

LD/TEC Controller with Mount



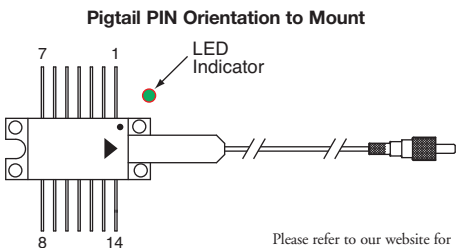
LDC1300B

The LDC1300B Laser Diode Controller combines a laser driver, thermoelectric cooler (TEC) controller, and a butterfly mount into a compact package that can be controlled through an RS-232 interface. The controller is well suited for use with Fabry-Perot Lasers (pages 1249 - 1256), Superluminescent Diodes (pages 1356 - 1363), and Optical Amplifiers (pages 1367 - 1380) that have an integrated TEC in a 14-pin butterfly package.

The LDC drive board can deliver source currents up to 1 A and TEC currents of  $\pm 2.5$  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 comes with a monitor photodiode sensor equipped with an FC mating port that can be used to measure the output power of the device in either dBm or mW.

CHARACTERISTIC	MIN	TYPICAL	MAX
<b>Electrical Parameter</b>			
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	–
Footprint	85 mm x 140 mm (3.35" x 5.51")		
<b>Computer Interface</b>			
Compatibility	Windows 95, 98, NT, 2000, or XP		
Interface	RS-232		

\*The chip temperature will be maintained by the TEC as long as the case is maintained at a temperature between 0 and 70 °C



Please refer to our website for complete models and drawings.

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

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

Features

- Laser Diode Driver Integrated with TEC Controller
- 14-Pin Butterfly Mount
- Controlled via RS-232 Interface
- Laser-Enabled LED Indicator
- Designed 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.



ITEM #	\$	£	€	RMB	DESCRIPTION
LDC1300B	\$ 1,895.00	£ 1,364.40	€ 1,648.65	¥ 15,103.15	Laser Diode Controller for Butterfly Packages