

The LDR1500E laser driver module provides a versatile and user friendly platform for stable current and TEC control of Raman Pump Lasers, etc. The fully integrated digital Eurocard modules are designed for device characterisation, prototype development and experimental systems and offer easy device integration, full PC control and monitoring, or set & forget operation utilising the on-board EPROM.

LDR module includes power supply, ZIF mount & heatsink for 14-pin butterfly package, USB interface & PC communications cable and full V-DRIVE control software for easy operation straight out of the box.

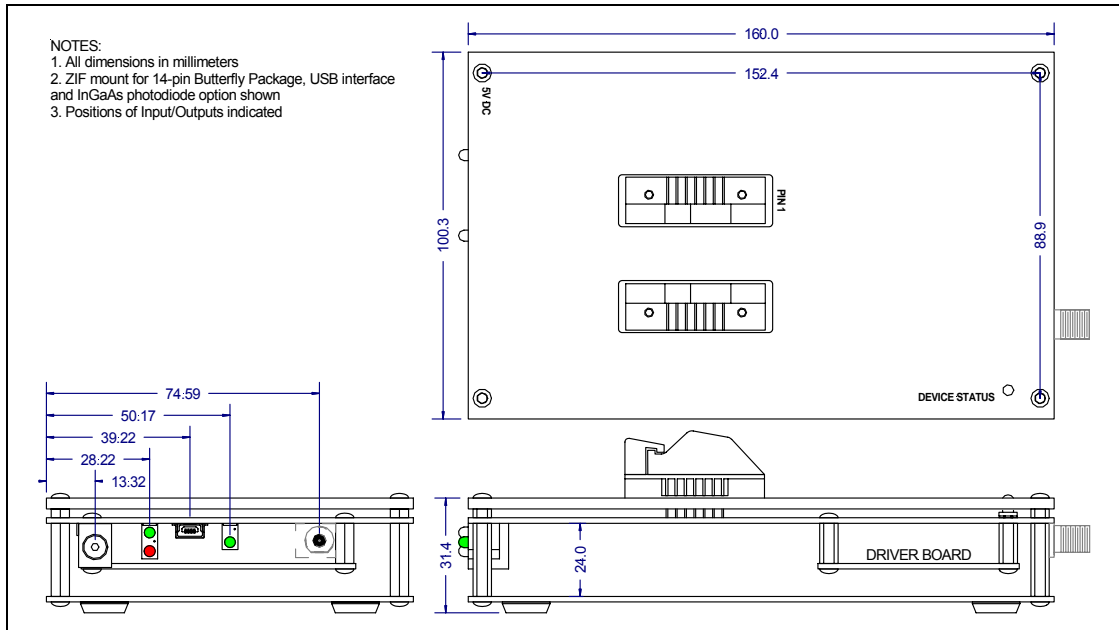
Features

- Device Drive Current up to 1.5A and TEC to 4A to ensure precise and stable device current and temperature control for a wide range of devices.
- Comprehensive driver software (V-DRIVE) supplied for full PC control and monitoring of the device. Optional V-DRIVE add-on for monitoring of up to 5 units simultaneously via USB interface.
- Microcontroller operation allows remote setting of device drive parameters via USB and eliminates the problems associated with manual setting of analogue potentiometers.
- Continuous traces of device drive parameters (power, current, forward voltage and temperature) are available on screen to enable ongoing monitoring of the device.
- V-DRIVE software includes LVI plotter allowing direct device characterisation with test data readily available in csv format.
- Device current & temperature settings can be saved to driver EPROM for set & forget operation with no need for connection to a PC.
- Integrated heatsink with demountable 14-pin Butterfly connectors as standard for easy device connection or changeover.
- User reconfigurable pin connections to suit various device pin out arrangements
- Custom modules available. Contact us to discuss custom device drivers with different specifications or other features.

Specification

ITEM	SPECIFICATION	COMMENT	
Current Source Subsystem			
Drive Current	10 – 1500 mA	User adjustable in 0.1mA increments	
Current stability (CC mode)	≤ 0.05%	8 hours @ 20°C, after warm up	
Forward Voltage	≤ 4 V		
TEC Subsystem (Temperature specifications assume a standard 10k NTC thermistor)			
TEC Current	≤ 4 A		
Temp. set-point range	10 – 40°C	User adjustable in 0.1°C increments	
Temp. control stability	±0.02°C	8 hours @ 20°C, after warm up	
External Power Monitor (optional)			
Input Optical Power	≤ 2.0 mW		
PC Communications			
Protocol	USB	USB connector	
General Data			
Supply Voltage	5.5 – 6.5 V	DC	
Supply Current	≤ 4.5 A	Depends on TEC draw	
Update Rate	3 Hz		
Operating Temperature	0 – 35°C		
Storage Temperature	-10 – 60°C		
Dimensions (LxWxH)	160 x 100 x 50 mm	Including 14-pin device connector	
Weight	0.325 kg		
V-Drive Software Compatibility	Windows 98SE/NT/2000/XP		
Common Device Suitability	Raman Pump Laser	14-pin Butterfly	
Device Pin Compatibility ¹	<p>LD = GK PD = GA</p>	<p>LD = GK PD = FL</p>	<p>LD = FL PD = FL</p>

1. LD – Laser Diode, PD - Photodiode, GK – Grounded Cathode, GA – Grounded Anode, FL – Floating



Ordering Information:

LDR 1500 E-

Driver:

1500 1500mA LDR Driver

Photodiode:

IF External InGaAs photodiode in FC receptacle
 NO None
 CU Custom Option

Example: LDR1500E-IF - LDR, 1500mA Eurocard LDR controller, with ZIF mount & heatsink for 14-pin Butterfly package, USB interface and InGaAs photodiode in FC receptacle

Included Items

The LDR laser current and TEC controller modules are supplied with the following items as standard to allow quick and easy operation straight out of the box.

- Full V-DRIVE control software
- ZIF mount & heatsink for 14pin butterfly package
- USB interface & PC communications cable
- 6V mains power supply
- Operators manual

For other options and device mounts please contact us.

Operation

A full operating manual is supplied describing the set-up and operation of the LDR1500E module and the V-DRIVE software.

Since we are committed to continuously improving the design and performance characteristics of our products, these specifications are subject to change without notice.

Date: November 2010