



LDP-CWL 90-10

Rev. 2001

Low noise wide range cw driver for High Power Laser Diodes



- Output current: 0.2 .. 90 A
- Compliance voltage: 0 .. 12 V
- Output power: 900 W
- Fast current extinction
- High precision: 70 mA current resolution
- Several protective features
- High efficiency

Product Description

The LDP-CWL 90-10 is one of the most versatile drivers from PicoLAS, offering a wide range from 200 mA to 90 A with a current setpoint resolution of less than 70 mA. For special applications a fast current extinction of less than 15 μ s is implemented. The low noise and wide range is achieved by a combination of a switchmode regulator and an analogue post stage. The analogue and digital interface makes it easy to use.

Intended fields of application are laser soldering and welding as well as generic surface treatment and DPSS.

The innovative current regulation concept of the LDP-CWL 90-10 produces, compared to the commonly used linear regulation concept, considerably less losses. Hence, only one supply voltage is needed for the control logic and the power stage.

In order to shield your laser diode from damage, the LDP-CWL 90-10 features a number of powerful protective safeguards:

- Integrated Soft Start
- Overtemperature shutdown
- Enable/Disable input
- Driver status output
- Protection of the laser diode against reverse currents

Output current	0.2 .. 90 A
Compliance voltage	0 .. 12 V
Current ripple	< 1 %
Current overshoot	< 1 %
Analog modulation (10 A _{pp})	TBD**
Current settling time (full-scale)	TBD**
Current setpoint input	Analog or digital
Current monitor	25 A / V
Voltage monitor	Via digital interface
Interfaces	RS232 / CAN / BOB
Supply voltage	18 - 24 V DC
Max. power dissipation	TBD**
Dimensions in mm	Full brick size
Weight	61 x 120 x 50
Operating temperature	194 g
	0 to +55 °C

* Specifications measured with a fast recovery diode instead of a laser diode.

Technical data is subject to change without further notice.

** See manual for further details

*** Not available in current firmware revision

Optional Accessories: LDP-C BOB
PLB-21