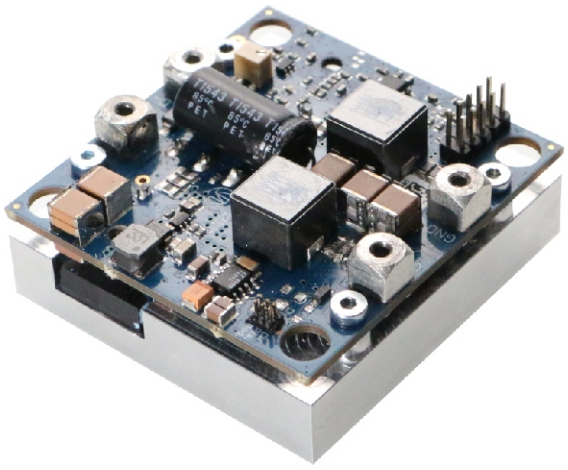
PicoLAS

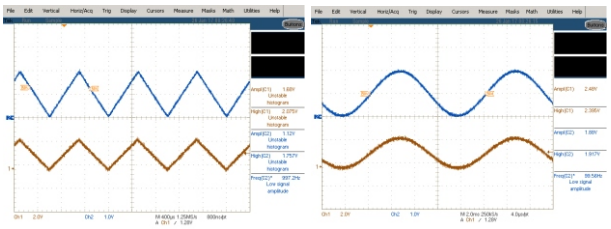
FOCUSSING POWER TO THE POINT

Rev.1911

LDP-CWL 06-20 / LDP-CWL 12-20

Laser Diode Driver high Perfomance and low Noise

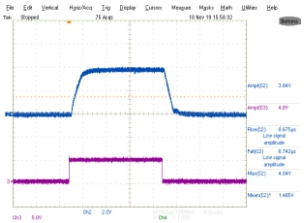




1 kHz

Blue: Current monitor
Brown: Input signal

100 Hz



Blue: Output pulse
Purple: Trigger signal

- Output current: 0 .. 6 A / 0 .. 12 A
- Compliance voltage: 0 .. 20 V
- Coverage of cw range
- Very low current ripple < 20 mA ; < 0.77 %
- Analog modulation up to 230 kHz
- Load protection included
- High efficient combination of switch mode and linear regulator

Technical Data*

Output current	0 .. 6 A / 0 .. 12 A
Max. compliance voltage	20 V
Current noise	< 20 mA ; < 0.77 %
Current overshoot	< 1 %
Analog modulation	230 kHz @ 3 A 100 kHz @ 12 A
Current settling time (full-scale) Pulse mode	< 25 µs¹ ; < 9 µs²
Current setting input	0 .. 4.8 V; LDP-CWL 12-20: 0.4 V/A LDP-CWL 06-20: 0.8 V/A
Current monitor	0.33 V/A
Trigger	Analog
Supply voltage	15 .. 48 V min. 10 V above compliance voltage
Power dissipation (cw) CW mode Modulation mode Pulse mode	 Max. typ. 20.4 W Max. typ. 65 W Max. 108 W
Dimensions in mm	60.9 x 57.8 x 30
Weight	158 g

* Specifications measured with a fast recovery diode instead of a laser diode.
Technical data is preliminary and subject to change without further notice.
¹ LDP-CWL 06-20 , ² LDP-CWL 12-20

Product Description

The LDP-CWL is a fast driver for typical laser diodes. With its high output voltage it is suitable for IR, blue laser diodes and all kinds of LED's. The combination of a switching and linear regulator. Yields a high perfomance, a high efficency with excellent low noise behavior. The LDP-CWL has a great linearity characteristic with a low output ripple. Depending on the working point the LDP-CWL generates a low drop-out inpendent of laser diode load.

- Innovative current regulation concept actively prevents laser diode from overcurrent
- Very low current ripple
- Overtemperature shutdown
- Shunt MOSFET short the output clamps in case of an error
- Protection of the laser diode against reverse currents
- High efficient combination of a switch mode an a linear regulator

Optional Accessories: LDP-C BOB

PicoLAS GmbH
Burgstr. 2
52146 Würselen
Germany

Phone: +49 (0)2405 64594 60
Fax: +49 (0)2405 64594 61

E-mail: sales@picolas.de
Web: www.picolas.de