

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

Rev.2101

Laser diode driver with high performance and low noise

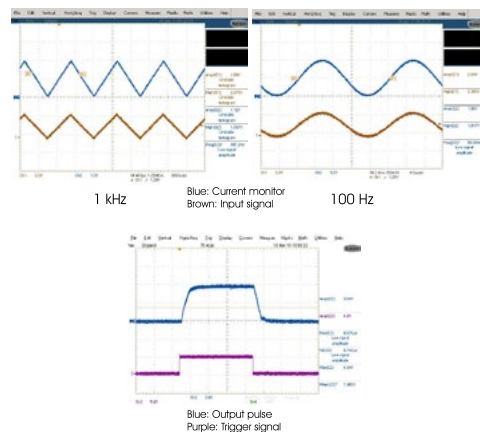


- Output current: 0 .. 6 A / 0 .. 12 A
- Compliance voltage: 0 .. 20 V
- Coverage of CW range
- Very low current ripple < 20 mA
- Analog modulation up to 230 kHz
- Load protection included
- High efficient combination of switch mode and linear regulator

Technical Data*

Output current	0 .. 6 A ¹ , 0 .. 12 A ²
Max. compliance voltage	20 V ^{1,2}
Current noise	< 20 mA ; < 0.77 %
Current overshoot	< 1 %
Analog modulation	260 kHz @ 3 A ^{1,2} 140 kHz @ 12 A ²
Current settling time (full-scale)	
Manual mode (for pulses)	< 3 µs ¹ , 4.8 µs ²
Current setting input scale	0 .. 4.8 V ² ; 0...2.4 V ¹ 0.4 V/A ^{1,2}
Current monitor output scale	3 A/V ^{1,2}
Trigger	Analog
Supply voltage	15 .. 48 V min. 10 V above compliance voltage
Power dissipation (cw)	
CW mode	Max. typ. 20.4 W
Modulation mode	Max. typ. 65 W
Manual mode	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 range 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 performance, high efficiency with excellent low noise behavior. The LDP-CWL has an exceptional linearity characteristic with a low output ripple. Depending on the operating point the LDP-CWL generates a low drop-out independent of laser diode load.

- Innovative current regulation concept actively prevents laser diode from overcurrent
- Very low current ripple
- Over temperature 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 and a linear regulator

Optional Accessories: LDP-C BOB