

LDP-CW 80-20

CW Driver for High Power Laser Diodes



- Output current: 2 .. 80 A
- Simmer current functionality
- Compliance voltage: 1 .. 20 V
- Analog modulation up to 2 kHz
- Optional housing available
- Stackprotector® and other protective features
- High efficiency

Technical Data:*

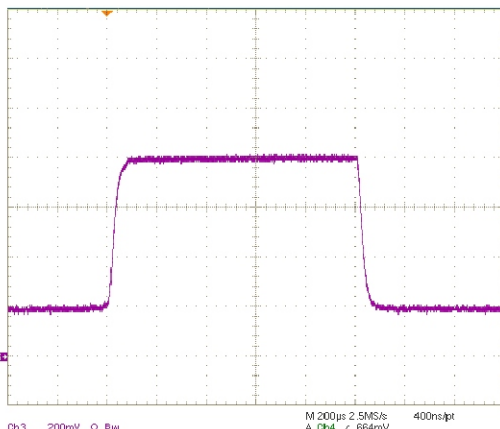


Figure: Current monitor output, scale: 20A/Div

| | |
|---|--|
| Output current | 2 .. 80 A |
| Max. compliance voltage | 20 V |
| Simmercurrent | 2 .. 80 A ** |
| Max. output power | 1600 W |
| Current ripple | < 1 A |
| Current overshoot | < 1 % |
| Analog modulation (60 A _{pp}) | > 2 kHz ** |
| Current settling time (full-scale) | < 150 μs |
| Current setting input | 0 .. 1.6 V external (50 A/V) |
| Current setting input | 50 A/V ** |
| Current monitor | 0.1 V/V ** |
| Voltage monitor | LDP-C BOB |
| Connectivity | PLB-21 USB 2.0 |
| Supply voltage | 4 .. 26 V DC (at least 1 V above compl. voltage) |
| Power dissipation @ 80 A / 12 V | 90 W |
| Dimensions in mm | 100 x 180 x 69 |
| Weight | 1052 g |
| Operating temperature | 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 details

Product Description:

The LDP-CW 80-20 is a compact and efficient current supply to drive cw laser diodes. The operating range includes continuous current as well as analog modulation of the output current. If required, a simmer current from 0% to 100% of the output current can be set up easily.

The innovative current regulation concept of the LDP-CW 80-20 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.

The LDP-CW 80-20 is suitable for a very wide range of applications. Especially several redundant protective features as well as a build in selftest enable the use for medical applications.

- Stackprotector® cuts the power stage from the supply
- Innovative current regulation concept actively prevents laser diode from overshoots and overcurrent
- A crowbar shorts the output in case of an error
- Integrated Soft Start
- Protection against transients through regulated current rise time
- Overtemperature shutdown
- Enable/Disable input
- Pulser status output
- Protection of the laser diode against reverse currents

Optional Accessories: LDP-C BOB
PLB-21

