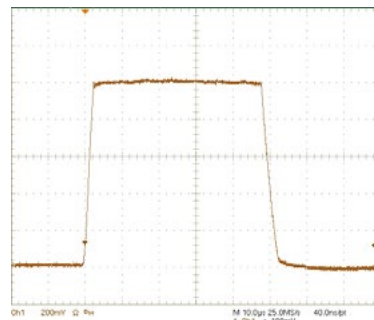


LDP-C 80-40

Driver for High Power Laser Diodes

Rev. 1905



Current monitor output, scale: 20A/Div

- Output current: 2 .. 80 A
- Compliance voltage: 1 .. 40 V
- Minimum pulse width: 4 μ s
- Stackprotector® and other protective features
- High efficiency

Technical Data*

Output current	2 .. 80 A
Max. compliance voltage	40 V
Max. output power	3200 W
Min. pulse width	< 4 μ s **
Max. pulse width	cw
Risetime	1 .. 5 μ s **
Max. rep. rate	> 80 kHz **
Current ripple	< 1 A
Current overshoot	< 5 %
Current settling time	< 1 ms
Current setting input	0 .. 2.0 V external (50 A/V)
Current monitor	50 A/V **
Voltage monitor	0.1 V/V **
Connectivity	LDP-C BOB PLB-21 USB 2.0
Supply voltage	12 .. 48 V DC (at least 4 V above compl. voltage)
Dimensions in mm	100 x 180 x 83
Weight	1200 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-C 80-40 is a compact and efficient current supply to drive laser diodes. The operating range includes continuous current as well as pulsing the diode.

The innovative current regulation concept of the LDP-C 80-40 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-C 80-40 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
- Driver status output
- Protection of the laser diode against reverse currents

Optional Accessories: LDP-C BOB
PLB-21