





LDP-V 80-100 V3.3

Driver Module for pulsed Lasers

Rev. 1905



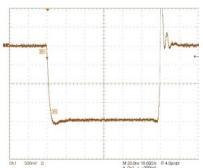


Figure: Current monitor output, scale: -10 A/Div

Product Description

The LDP-V 80-100 is a small and inexpensive source for nanosecond pulses. The device is optimized for pulse repetition from single shot up to MHz repetition.

Its typical application is driving pulsed laser diodes. Those can be mounted directly onto the LDP-V, eliminating the need for strip lines. The diode must be electrically isolated from earth (chassis) ground. Compatible packages: TO-18, TO-5, TO-52, 5.6 mm, 9 mm and similar.

Despite its small size, the LDP-V is designed for ease of use. It eliminates the need for multiple peripheral supply units. A single 15 \dots 24 V DC supply and a triggering signal are all which is required for operation.

Additionally, you can upgrade the LDP-V with the PLCS-21 controller to enable USB 2.0 communication with a PC or the external operating unit PLB-21. Do not use PLCS-21 with higher supply voltage than 15 V. If you use the PLCS-21 with higher voltage than 15 V the device will be damaged.

- Compact OEM module
- 5 to 80 A output current
- < 6 ns rise time</p>
- Pulse width control via SMC trigger input $(12 \text{ ns to } 10 \text{ } \mu\text{s})$
- Rep. rates from single shot to 2 MHz
- Single +15 .. 24 V supply
- Current monitor and isolated monitor
- Applications: LIDAR, Measurements, Ignition, Rangefinding, Biochemistry, ...

Technical Data*

Output current Max. output voltage - int. high voltage Rise time Trigger delay Min. pulse duration Max. pulse duration Trigger range

Trigger input

Trigger output Current monitor Supply voltage

Max. power dissipation Dimensions in mm Weight

5 .. 80 A 100 V 0 .. 100 V, 1 A, 15 W

Typ. 4 ns, max. 6 ns Typ. 36 ns, max. 40 ns 12 ns

< 1 µs (@ 80 A)** Single shot to 2 MHz**

(refer to diagram with operating limits) 5 V into 50 Ω via SMC-

jack Galvanically isolated Rogowski coil

40 A/V into 50 Ω 15 .. 24 V, 2.2 A Optional: 0 .. 100 V, 30 W (external high voltage)

25 W 75 x 44 x 20 76 g -20 to +55 °C

Operating temperature * Measured into a short instead of laser diode. Technical data is subject to change without further notice.

** See manual for detailed information.

Optional Accessories: PLCS-21

PLB-21 LDP-V BOB LDP-V KIT

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