

## LDP-V 80-100 V3.3

Driver Module for pulsed Lasers

Rev. 1905

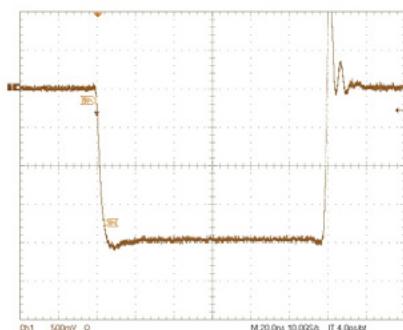
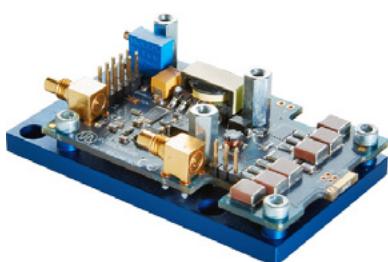


Figure: Current monitor output, scale: -10 A/Div

### 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 .. 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
- Pulse width control via SMC trigger input (12 ns to 10  $\mu$ 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	5 .. 80 A
Max. output voltage	100 V
- int. high voltage	0 .. 100 V, 1 A, 15 W
Rise time	Typ. 4 ns, max. 6 ns
Trigger delay	Typ. 36 ns, max. 40 ns
Min. pulse duration	12 ns
Max. pulse duration	< 1 $\mu$ s (@ 80 A)**
Trigger range	Single shot to 2 MHz** (refer to diagram with operating limits)
Trigger input	5 V into 50 $\Omega$ via SMC-jack
Trigger output	Galvanically isolated Rogowski coil
Current monitor	40 A/V into 50 $\Omega$
Supply voltage	15 .. 24 V, 2.2 A Optional: 0 .. 100 V, 30 W (external high voltage)
Max. power dissipation	25 W
Dimensions in mm	75 x 44 x 20
Weight	76 g
Operating temperature	-20 to +55 °C

\* 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