

LDP-V 240-100 V3

Driver Module for Pulsed Lasers

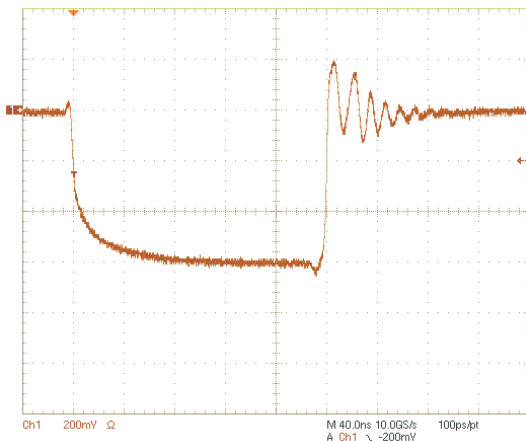
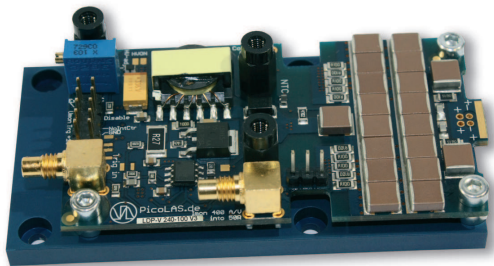


Figure: Current monitor output, scale: -80 A/Div

- Compact OEM-module
- 40 to 240 A output
- 25 ns rise time
- Pulse width control via SMC trigger input (60 ns to >1 μ s)
- Rep. rates from single shot to 2 Mhz
- Single +15 V supply
- Current monitor and isolated monitor
- Applications: LIDAR, Measurements, Ignition, Rangefinding, Biochemistry, ...

Technical Data:*

| | |
|------------------------|---|
| Output current | 40 .. 240 A |
| Max. output voltage | 100 V, |
| - int. high voltage: | 0 .. 100V, 1 A, 15 W |
| Rise time | typ. 25 ns, max. 35 ns |
| Trigger delay | typ. 36 ns, max. 40 ns |
| Min. pulse duration | 60 ns |
| Max. pulse duration | > 1 μ s** |
| Trigger range | single-shot to 2 Mhz** (refer to diagram with operating limits) |
| Trigger input | 5 V into 50 Ω via SMC-jack |
| Trigger output | galvanically isolated Rogowski-coil |
| Current monitor | 400 A / V into 50 Ω |
| Supply voltage | +15 V 2,2 A <u>optional:</u> + 0 .. 100 V 40W (external high voltage) |
| Max. power dissipation | 40 W |
| Dimensions | 88 x 44 x 20 mm |
| Weight | 90 g |
| Operating temperature | -20 to + 55 $^{\circ}$ C |

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

** See manual for detailed information.

Product Description:

The LDP-V 240-100 V3 is a small and inexpensive source for nanosecond pulses. The device is optimized for pulse-repetition from single-shot up to MHz-repetition with duty-cycles up to 7.5%**.

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 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 USB2.0-communication with a PC or with the external operating unit PLB-21.

Optional Accessories: PLCS-21
PLB-21
LDP-V-BOB
LDP-V-KIT