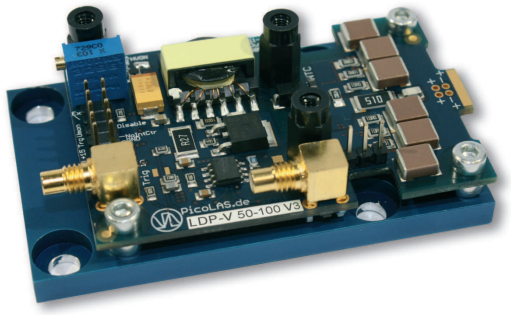
PicoLAS
FOCUSSING POWER TO THE POINT

LDP-V 80-100 V3.3

Rev.1609

Driver Module for Pulsed Lasers



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

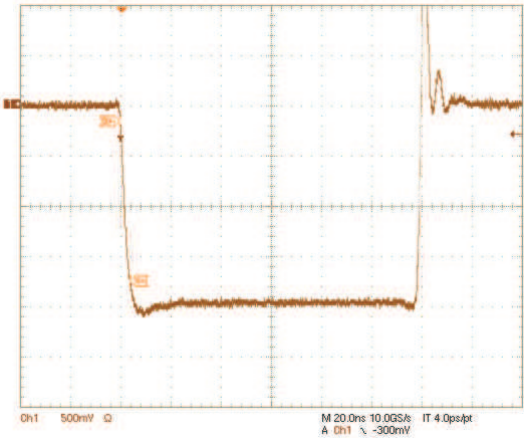


Figure: Current monitor output, scale: -10 A/Div

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 µs (@ 80 A)**
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	40 A/V into 50 Ω
Supply voltage	15 .. 24 V, 2.2 A Optional: 0 .. 100 V, 30 W (external high voltage)
Max. Power Dissipation	25 W
Dimensions	75 x 44 x 20 mm
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.

Product Description:

The LDP-V 80-100 V3.3 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 USB2.0-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.

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

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