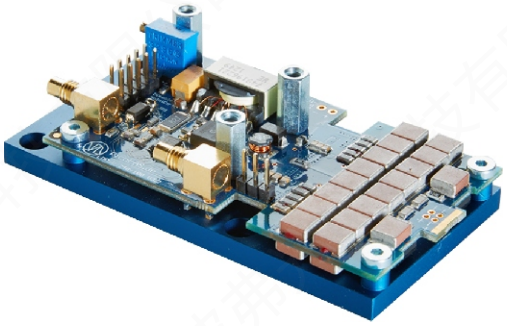
PicoLAS

FOCUSSING POWER TO THE POINT

Rev.1905

LDP-V 240-100 V3.3

Driver Module for pulsed Lasers



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

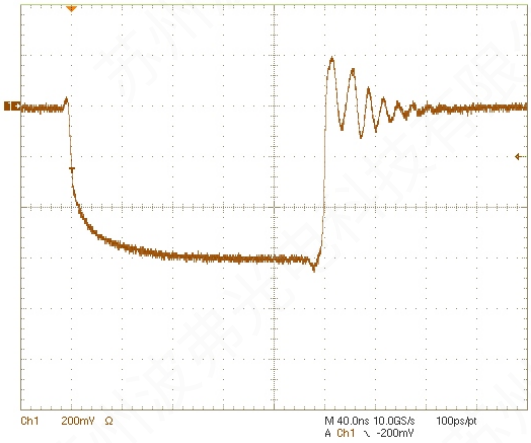


Figure: Current monitor output, scale: -80 A/Div

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 µs**
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 .. 24 V, 2.2 A Optional: 0 .. 100 V, 30 W (external high voltage)
Max. power dissipation	40 W
Dimensions in mm	88 x 44 x 20
Weigth	90 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 240-100 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.
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