

LDP-VRM 45-12 CA

Laser Diode Driver



PicoLAS

FOCUSSING POWER TO THE POINT

Rev. 2501



Product description

The LDP-VRM 045-12 CA is a fast driver for typical single laser diodes. With its high output voltage it is suitable for IR, blue LD's and all kinds of LEDs (no pure resistive load). Depending on the supply voltages output currents of up to 5.0 A can be achieved. The internal DC/DC converter stabilizes the voltage drop across the driving MOSFET to prevent excessive losses.

- » Analog modulation dc .. 100 kHz
- » Output current: 0 .. 5 A
- » High speed
- » Adaptive DC/DC converter

Technical data*

Output current (depending on supply voltage)	0 .. 3.4 A @ $U_{in} > 12\text{ V}$ 0 .. 4.5 A @ $U_{in} > 18\text{ V}$ 0 .. 5.0 A @ $U_{in} = 24\text{ V}$
Max. compliance voltage	Single laser diode, up to 12 V
Current noise	< 3%
Current overshoot	< 5%
Analog modulation	Approx. 100 kHz
Bandwidth	
Current setting input	0 .. 5 V
Current monitor	100mV/A
Trigger	Analog / TTL (jumper)
Supply voltage	12 .. 24 V, min. 3V above compliance
Power dissipation	6 W @ 4.5 A and $U_{in} 12\text{ V}$
Dimensions in mm	40 x 27.5 x 19.8
Weight	15g
Operating temperature	0 to +55 °C

*Specifications measured with a fast recovery diode instead of a laser diode.
**See manual for details
Technical data is subject to change without further notice.

- » Innovative current regulation concept actively prevents laser diode from overshoots and overcurrent
- » Protection against transients through regulated current rise time
- » Adaptive DC DC converter for lowest losses

Accessories

- » None