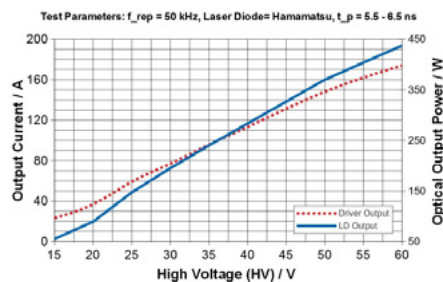
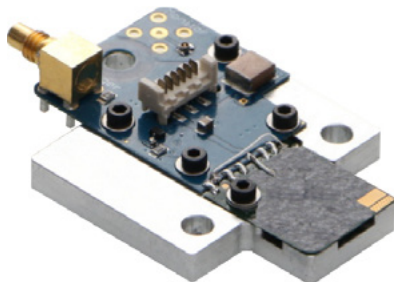


## LDP-AV 1N50-200

Rev. 2004

LIDAR - Ultra compact Driver Module for pulsed Lasers



### Product Description

The LDP-AV 1N50-200 is a driver for single digit nanoseconds pulses with a very high peak current. It is especially suited for LIDAR (Light Distancing and Ranging) application due to its ultra compact design. The maximum output power exceeds 515 W which can be utilized for powerful LIDAR Flash concepts. The laser diode can be directly mounted onto the PCB to achieve pulse durations of e.g. 5 ns. Exact pulse duration and LD pads can be customized for your applications.

The driver consists of two parts: The stamp sized driver which contains the complete driver electronics and the larger evaluation board which contains only the connectors for an easy access to the necessary control and input signals. The advantage of our compact and small design makes it possible to achieve a high power density of  $1.18 \text{ W/mm}^2$  and offers output currents up to 200 A with fixed pulse durations of several ns.

- Ultra compact driver:  $19 \times 20 \text{ mm}^2$
- 20 to 200 A output current
- Fixed pulse duration e.g. 5 ns
- Repetition rates from single shot to 200 kHz
- Easy setting of the output current via an external HV voltage
- Applications: LIDAR, Measurements, Ignition, Rangefinding, Biochemistry, ...
- Flexible platform to install and test laser diodes
- Advanced minimal inductance layout
- High power density

### Technical Data\*

Output current	20 .. 175 A* 20 .. 200 A (expected)
Pulse duration	Fixed, e.g. 5 ns
Repetition rate	Single shot to 200 kHz**
Max. duty cycle	0.1 %
Trigger input	5 V into 50 $\Omega$
Supply voltage	+5 V 0.05 A
Charging voltage	HV: 0 .. 95 V / 0 .. 0.2 A
Dimensions in mm	19 x 20
Weight	26 g
Operating temperature	0 .. 55 °C

\* Tested with Hamamatsu laser diode 4 Emitter and Triple Stack

\*\* See manual for detailed information.

### Ordering Options

- HV: Integrated HV module
- EVA: With evaluation board is standard (Without EVA is only available for volumes > 1000 units)
- B: Laser diode pads are suitable for wire-bonding