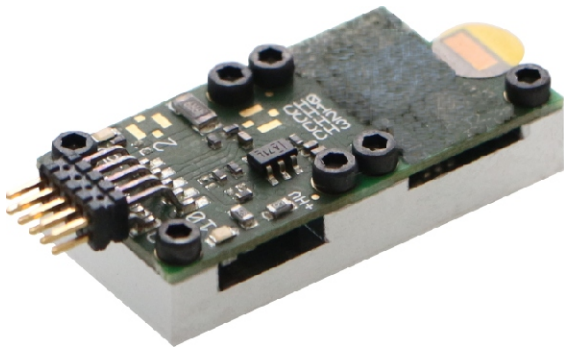


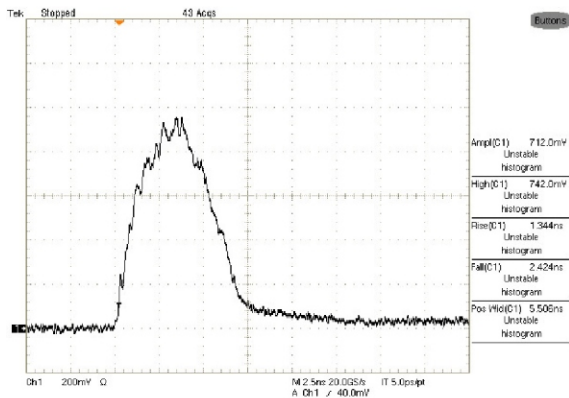


## LDP-AV 4N55-90

### LIDAR - Sequential controlled Laser Diode Driver



- Ultra compact driver 30 x 15 mm<sup>2</sup>
- 4 independent channels
- 4 x 90 A or 1 x 360 A output current \*\*
- Fixed pulse duration e.g. 5.5 ns
- Rep. rates from single shot to 200 kHz
- Single +5 V supply
- Easy settings of output current via an external high voltage
- Applications: LIDAR, Measurements, Ignition, Rangefinding, Biochemistry, ...
- Flexible platform to install and test laser diodes
- Advanced minimal inductance layout



Typical optical output signal, driver designed for 5.5 ns pulses (time scaling 2.5 ns/div).

### Technical Data

Output current	0 .. 40 A*
Each channel	0 .. 90 A **
Flash	360 A
Pulse duration	Fixed e.g. 5.5 ns
Repetition rate	Single shot to 200 kHz **
Max. duty cycle	0.1 %
Trigger input	+5 V into 50 Ω
Supply voltage	+5 V 0.05 A
Charging voltage	HV +0 .. 95 V / 0 .. 0.5 A
Dimensions	30 mm x 15 mm
Weight	16 g
Operating temperature	0 .. 55 °C

\* Tested with OSRAM SPL PL90\_3 laser diode

\*\* See manual for detailed information.

### Product Description

The LDP-AV 4N55-90 is a nanosecond driver especially designed for multi-channel LIDAR applications. It is a 4-channel high side driver which is capable for driving more than 360 A in total with fixed pulse durations of ~ 5.5 ns. The exact pulse duration can be adjusted by PicoLAS to your demands. The laser diode can be mounted directly on top of the driver.

With the compact and small design the driver achieves a high power density. The output of 360 A is accomplished by 4 separate channels. Each channel can be controlled independently and provides a maximal output current of up to 90 A.