

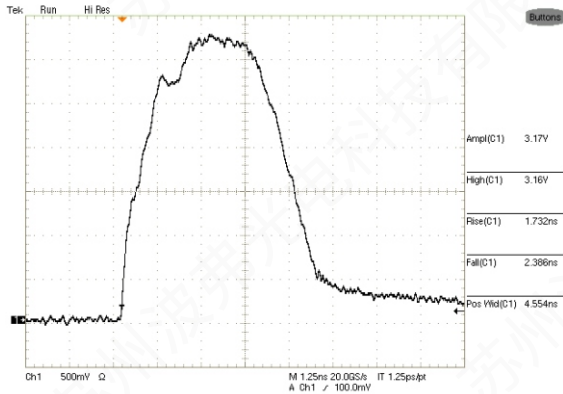


## LDP-AV 16N45-40

### LIDAR - Sequential controlled Laser Diode Driver



- Ultra compact driver 40 x 24 mm<sup>2</sup>
- 16 independent channels
- 16 x 40 A or 1 x 640 A output current\*\*
- Fixed pulse duration e.g. 4.5 ns
- Rep. rates from single shot to 100 kHz
- Easy settings of output current via an external voltage
- Applications: LIDAR, Measurements, Ignition, Ranging, Biochemistry, ...
- Flexible platform to install and test laser diodes
- Advanced minimal inductance layout
- High power density



Typical optical output signal, driver designed for 4.5 ns pulses (time scaling 1.25 ns/div).

### Technical Data

Output current	16 x 0 .. 40 A
Each channel	1 x 640 A
Flash	Fixed e.g. 4.5 ns
Pulse duration	Single shot to 100 kHz**
Repetition rate	TBD
Max. duty cycle	+5 V into 50 Ω
Trigger input	+5 V 0.05 A
Supply voltage	HV +0 .. 55 V / 0 .. 0.2 A
Charging voltage	
Dimensions	40 mm x 24 mm
Weight	TBD
Operating temperature	0 .. 55 °C

\* Tested with OSRAM SPL PL90\_3 laser diode  
 \*\* See manual for detailed information

### Product Description

The LDP-AV 16N45-40 is a nanosecond driver especially designed for multi-channel LIDAR applications. It is a 16-channel high side driver which is capable for driving more than 640 A in total. 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 640 A\*\* is accomplished by 16 separate channels. Each channel can be controlled independently and provides a maximal output current of up to 40 A.