



## Transmitter module OPM-LDb-5

### Features

- Optical transmitter for LIDAR applications
- A compact and robust OEM module for variety of applications, including automotive
- Peak current up to 50A and peak power up to 120W per laser diode
- Supports 1, 2 or 3 laser diodes in serial connection
- Programmable pulse-width setting from sub-ns to 5ns
- Operating frequency from DC to over 5MHz\*
- A single 12V power supply
- A built-in step up power supply
- LVTTTL / TTL input
- Wide selection of laser diodes in TO can or SMT packages
- Selection of wavelengths: Range from visible to 16xx nm.
- Enhanced thermal design to maximize performance
- Mounting holes and bracket options to fit the module in your system and attach optics

(\* ) With reduced peak power

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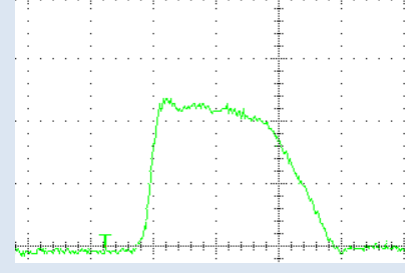
Prototype 35mm X 30mm



Prototype with a 1/2" lens



5ns optical pulse (I=40A)



### Description

The OPM-LDb-5 was designed for systems requiring a short optical pulse source with high peak power. The OPM-LDb-5 operates in frequencies of DC up to 4MHz. Peak current of up to 50A and total optical peak power over 300W – depending on the selected laser diodes and their configuration.

The module operates on a single 12V power supply and a trigger input signal in LVTTTL or TTL levels. With its built-in step-up power supply the module can drive up to 3 laser diodes connected serially and mounted on board.

The user can program any optical pulse-width in the range of sub-nanosecond to 5ns (or longer pulses upon request).

The module was designed to be integrated in real-life systems that operate for years. We offer a variety of mounting options and a choice of perpendicular optical transmission or on-axis - to the front of the module.

A wide selection of laser diodes is offered for the OPM-LDb-5. These include wavelengths in the visible range 8xx, 9xx and 15xx nm.

### Product applications

- LIDAR for Automotive, AR systems
- High resolution LRF
- Time-of-flight cameras
- Pulsed laser source/driver for electro-optics labs

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