# Transmitter module OPM-LDb-5-1

PRELIMINARY

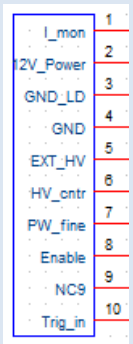
## Features

- 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
- Programmable pulse-width setting from sub-ns to 5ns
- Operating frequency from DC to over 5MHz*
- Operates on a single 12V power supply
- A built-in step up power supply
- LVTTL / TTL input
- Wide selection of laser diodes in TO can, SMD package or chip.
- Selection of wavelengths: Range from visible to 16xx nm.
- Enhanced thermal design to maximize performance
- Four mounting holes to fit the module in your system and attach optics

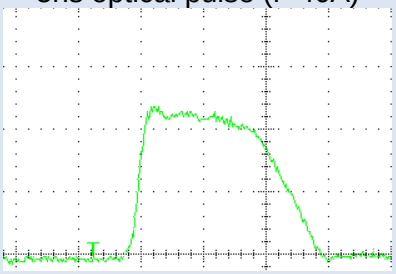
(*) With reduced peak power

Top view: 30mm X 28mm

Pin-out




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 5MHz. Peak current of up to 50A and optical peak power (at 905nm) over 120W – depending on the selected laser diode. Average optical power is limited to 0.12W (0.15W for short bursts). The module operates on a single 12V power supply and a trigger input signal in LVTTL or TTL levels (rising edge).

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

Pulsewidth and peak power programming is does either by on-board potentiometers or by external analog voltage controls. A dedicated monitor signal indicates the average laser current.

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.

PRELIMINARY

## Product applications

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