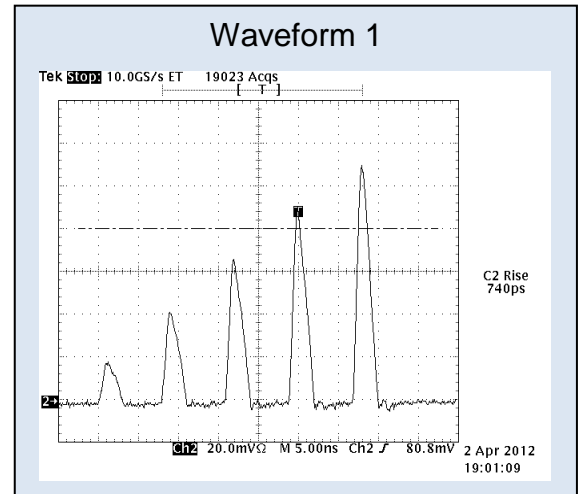


# Seed Laser Assembly with pulse shaping

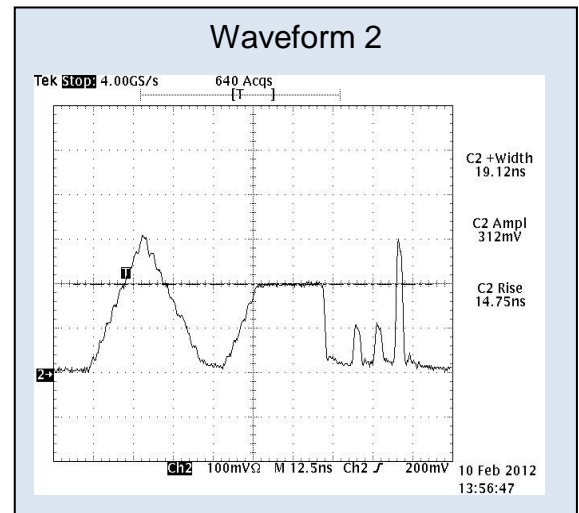
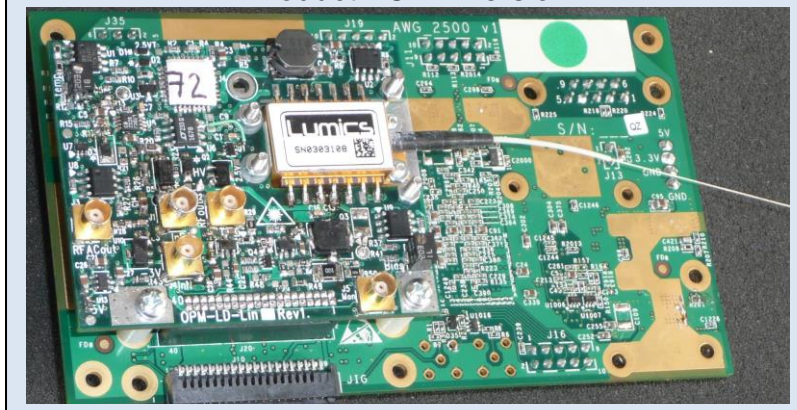
Preliminary

## Features

- Multiple functions integrated in one unit:
  - Arbitrary waveform generator
  - High bandwidth linear current driver
  - Efficient TEC controller
  - Laser diode
- OPM's Anypulse™ technology
- Flexible pulse shaping with **1ns resolution**
- Laser current up to 2A with 11 bit resolution
- Triggering modes: Internal, external, loops
- Serial interface to PC or to customer's system
- PC control and intuitive GUI control
- Available wavelength: 1550nm, 1064nm or custom
- OEM circuit board (12cm x 7cm) or lab instrument



Product - OEM version



## Description

The OPM-LD-ps series seed laser assembly is an integrated solution for the seed (oscillator) part of pulsed MOPA fiber lasers systems. The assembly includes all the key functions needed in a high performance seeder, including an arbitrary waveform generator, laser driver, TEC controller and an integrated laser diode.

The product is designed to operate in a wide temperature range and in maintenance-free conditions – making it a good choice for integration in laser systems for industrial, bio/medical and military applications.

### Benefits of pulse shaping

- Comprehensive waveform control to enhance performance of pulsed fiber laser systems
- Increases energy conversion efficiency in wavelength converters.
- Adds flexibility to laser systems to perform a wide range of material processing tasks.

### Product applications

- Seed laser for Fiber Lasers
- Simulator for laser-range-finders and LIDAR systems
- Waveform or pulse generator for high speed electronic systems

OPM-LD-ps – Bench-top version



Preliminary



OPM-LD-ps – PC user interface

Sample Number	Time [nsec]	Pulse Amp. % from Full Scale	Pulse Amp. in Hex Mode
1	0	0	0000
2	1	10	00CC
3	2	11	00E1
4	3	12	00F5
5	4	13	010A
6	5	15	0133
7	6	17	015B
8	7	20	0199
9	8	25	01FF
10	9	35	02CC
11	10	50	03FF
12	11	70	0598
13	12	95	0798
14	13	95	0798
15	14	95	0798
16	15	0	0000
17	16	0	0000
18	17	0	0000
19	18	0	0000
20	19	0	0000
21	20	0	0000
22	21	0	0000
23	22	0	0000
24	23	0	0000
25	24	80	0665
26	25	0	0000
27	26	0	0000
28	27	0	0000