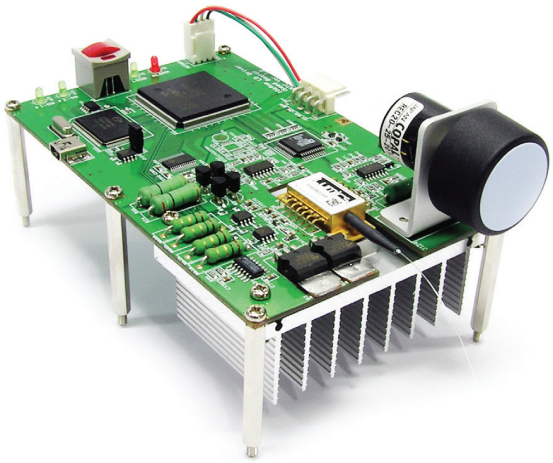
Seed Laser Diode Driver - SLDD



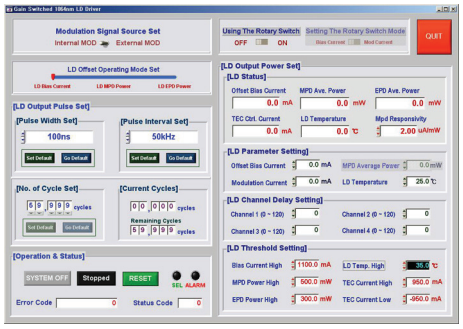
Features

High current module & High speed module
Min. 400ps pulse width up to CW output
Up to max. 18Ampere pulse & 1A CW output
Various superimposed pulse shape control
Wide repetition rate range of 1kHz to 50MHz (1GHz)
Remote control & monitoring via GUI and USB2.0

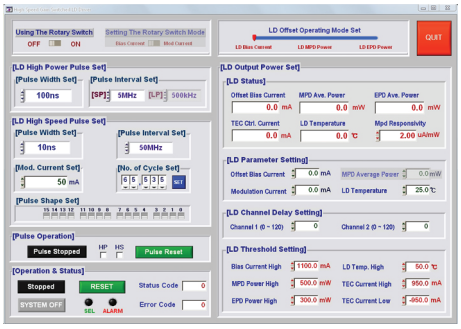
Applications

Fiber laser seed laser diode driver
Pump laser diode driver
SLED broadband source laser driver
SOA type optical amplifier module driver

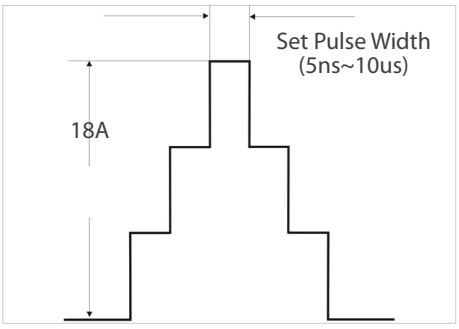
The High Speed Seed LD Driver (SLDD) module is an efficient module for the seed source driver and TE cooled laser applications. This SLDD module is a kind of the laser driver that can be used as short pulse laser drivers for fiber laser system. The SLDD module outputs very short pulse up to 400ps width and various shapes of laser pulse by superimposing several pulse signals generated by the built-in high speed FPGA processor. The SLDD module can be controlled and monitored through the Graphic User Interface (GUI) on a remote PC which is connected via a USB2.0. By using the GUI and knob, users can control the pulse width, repetition rate, current, pulse shape and thresholds.



High Current Module



High Speed Module



Superimposed Pulse Shape

Specifications

Parameters	Values	
	High Current Module	High Speed Module
Connector Type	14-Pin Butterfly	14-Pin Butterfly
Pulse Width	5ns ~ 10us	400ps~1us(High Speed), 5ns~10us(High Current)
Pulse Modulation Current	Max. 18A	80mA(High Speed), 18A(High Current)
Repetition Rate	1kHz ~ 50MHz	1kHz ~ 1GHz
Pulse Delay	5ns ~ 6.4us	5ns ~ 6.4us
Number of Superposition Pulse Channel	12	3(one for high speed, two for high current)
LD Offset Current	Max. 1A	Max. 1A
Temperature Control Range	15 ~ 40℃	15 ~ 40℃
TE Cooler Current	±1.2A	±1.2A
LD Output Power Control (MPD mode)	Max. 750mW	Max. 750mW
External Optical Power Measurement	Max. 20mW (Option)	Max. 20mW (Option)
Interface	USB 2.0	USB 2.0

Ordering Information Model No. : OPTOWARE-S401 – SLDD (High Current Seed Laser Diode Driver)
: OPTOWARE-S404 – HSLDD (High Speed Seed Laser Diode Driver)