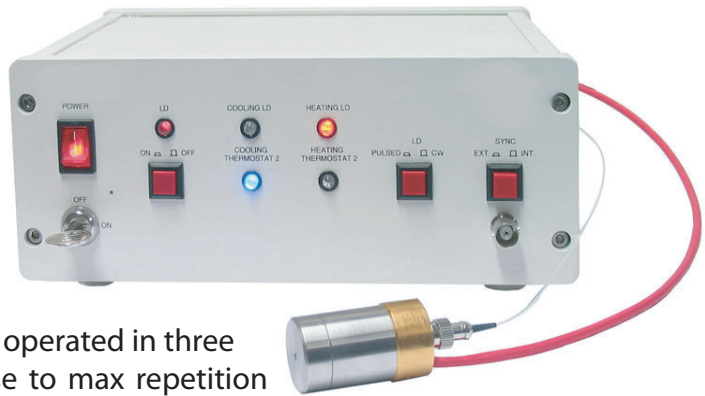


Grommet

Diode Pumped Nd:LSB Microchip Solid-state Lasers

Del Mar Photonics Inc. introduces new high peak powers (up to 16 kW) with sub-nanosecond pulse lengths or high repetition rates (up to 100 kHz) solid-state lasers. This family of highly reliable, lasers consists of a power supply unit and laser head. The power supply unit includes a laser diode (LD) driver, fiber pigtailed LD, and internal pulse generator. The laser repetition rate can be operated in three different modes, and changed from single pulse to max repetition rate in either pulsed LD pumping mode. Three ways to operate the laser include: 1. Repetition rate is fixed by internal pulse generator (Pulsed LD pumping); 2. Repetition rate is fixed by external TTL levels pulses (Pulsed LD pumping); 3. Repetition rate is fixed by continuous LD pump current.



APPLICATIONS

- Pump source of harmonic generators
- Optical parametric oscillators and amplifiers*
- Two-photon microscopy
- Fluorescence microscopy
- Test and measurements in different Photonics Systems
- Low-coherence "white light" interferometry
- Optical coherence tomography
- Spectroscopy

* based on the periodically poled KTP and LiNbO₃ crystals

G-01 produces pulses of first harmonic
G-01SH produces pulses of second harmonic
G-01CW continuous wave laser

Grommet-01 (or Grommet-01SH)

+

Photonic crystal fiber

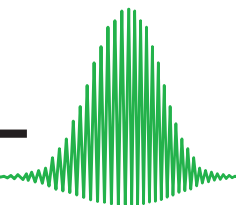


Ultra-bright supercontinuum source

SPECIFICATIONS

Model	G-01-1	G-01-2	G-01-3	G-01-4	G-01SH-1	G-01CW
Wavelength, nm	1062	1062	1062	1062	531	1062
Average output power (max), mW	100	120	125	65	>50	0-200
Pulse energy, μJ	2	3	5	6.5	2	-
Pulse duration, ns	0.6	0.8	0.6	0.7	<0.5	-
Repetition rate (max), KHz	50	40	25	10	25	-
Beam profile	M ² < 1.2					
Pulse spectral structure	single longitudinal mode					multimode
Polarization ratio	> 100:1					
Operating temperature, °C	10-30					
Laser head dimensions, mm						
Diameter	25	25	25	25	25	25
Length	44.5	44.5	44.5	44.5	76.5	44.5

DEL



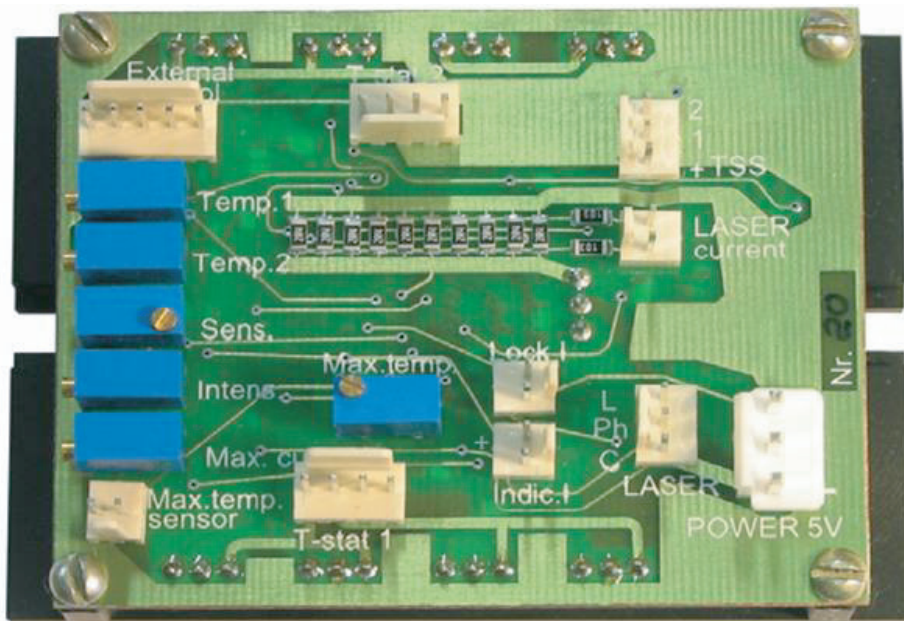
MAR PHOTONICS

www.dmpotonics.com



Laser diode driver is designed for safe operation of laser in CW or pulsed mode. It is a laser diode driver with a two independent Peltier TE coolers. Highly-efficient design limits power dissipation and simplifies heat-sinking requirements. Laser diode driver requires a 5 V stabilized power supply (available as optional).

- Two channel temperature controller
- Operation in CW or pulsed mode
- Slow and soft start, typically within 1 ms
- Allow to adjust the diode current, and temperatures of two channels
- Protection against excessive current, heat, reverse polarity
- Feedback photodiode and thermo-resistor circuits



SPECIFICATIONS

Output to Laser Diode	
Maximum voltage	3.0 V
Current:	
standart	up to 2 A
optional	up to 10 A
long-term stability	0.5%
pulsation level	<0.1%

Heat-sink	
Temperature:	
setting range	+5 to 50 °C
accuracy	0.1 °C
Peltier TE cooler:	
maximum voltage	3.5 V
maximum current	8 A
Max. power consumption	110 VA
Dimensions	85x60x40 mm

DEL  **MAR PHOTONICS**

4119 Twilight Ridge, San Diego, CA 92130, USA Tel: (858) 876-3133 Fax: (858) 630-2376
E-mail: sales@dmpotonics.com URL: www.femtosecondsystems.com