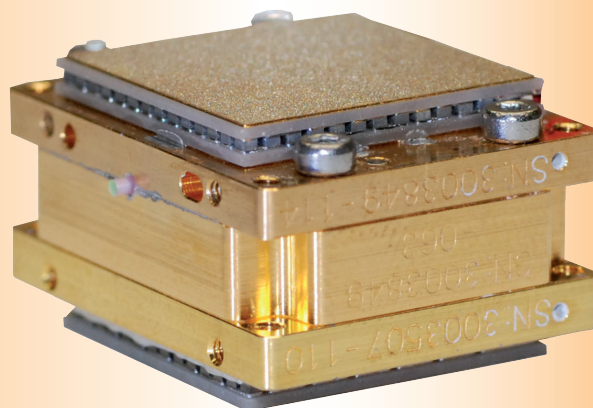


High Power Mid-IR DPSSL Module

DPM-2 (Er:YAG)

- Ultra-Stable High Power Mid-IR Laser
- Highly Efficient Diode Pumping
- Ideal for Fiber Coupling into ~ 100 µm
- No High-Voltage Required
- Maintenance Free
- Passively Cooled
- Battery Operation Possible
- Air Cooling Possible



Product Description

The world's most powerful diode-pumped Er:YAG laser module in this size is available for industrial and medical applications. The average output power of up to 2 W and repetition rates of up to 2 kHz allows controlled and at the same time precise treatments.

Specifications

Optical Parameters	Water cooling	Air cooling
Wavelength	2940 nm	
Average Output Power (max)	2 W	1W
Pulse Energy (max)	20 mJ	10 mJ
Pulse Repetition Rate	up to 2 kHz	500 Hz
Pulse Duration	30 to 500 µs	
Average Current (max)	30 A	7A
Mode of Operation	Pulsed	
Beam Quality	M ² < 5	
Efficiency (optical-optical)	~ 10 %	
Beam Diameter	0.6 mm	
Divergence	< 25 mrad	
Cooling Requirements		
Coolant	Distilled Water & Corrosion Inhibitor	Forced Air
Coolant Temperature	20 to 35 °C	< 28°C
Coolant Flow Rate	≥ 1 lpm	tbd
Coolant Pressure	(1 -3) bar	
Required Cooling Power	≥ 200 W @ 25 °C Room Temperature tbd	
Mechanical Dimensions (Laser incl. TECs)		
W x D x H	30 x 32 x 25 mm	
Weight	60 g	

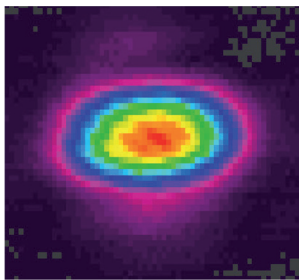
DPM-2 (Er:YAG)

Specifications

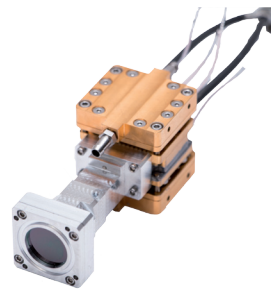
Electrical Parameters

Diode Forward Voltage	2 V
Diode Forward Current (max)	400 A Pulsed
Average Power Consumption (max)	< 120 W incl. 2 TECs
max Ripple / Overshoot	< 5 %
TEC Voltage	2x < 10 V
TEC Current	2x < 9 A

Beam Profile at 1 W

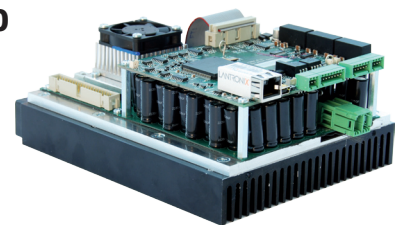


DPM-2 (Er:YAG) with optics



FACTBOX INTEGRABLE LASER DIODE DRIVER LDD-05400

Recommended for use with DPM-2 (Er:YAG) laser module



Specifications (Water & Air Cooling)

Output Current	up to 400 A
Rise Time (10 - 90%)	< 20 μ s
Mechanical Dimensions (W x D x H)	200 x 150 x 85 mm

