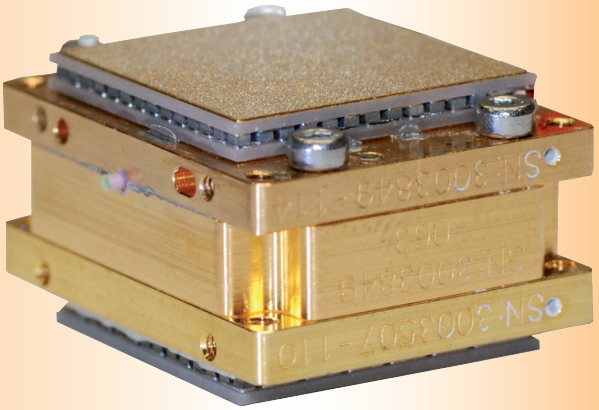
High Power
Mid-IR DPSSL Module

3 m.i.k.r.o.n™
Innovative Laser Systems

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

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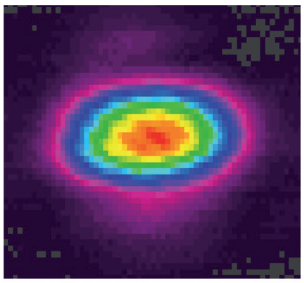
Specifications (Start of Life)

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

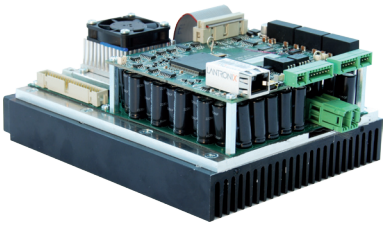
Beam Profile at 1 W



DPM-2 (Er:YAG) with optics

FACTBOX INTEGRABLE LASER DIODE DRIVER LDD-05400

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



Specifications

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

Certified System swissTS ISO 9001

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