

High Energy - Short Pulse Mid-IR DPSSQL Module

QDPM-5 (Er:YLF)

- Ultra-Stable High Power Mid-IR Laser
- Nanosecond Pulses with up to 25 mJ
- Highly Efficient Diode Pumping
- Ideal for Fiber Coupling into $\sim 200 \mu\text{m}$
- No High-Voltage Required
- Maintenance Free



Specifications

Optical Parameters

Wavelength	2810 nm
Average Output Power (max)	5 W
Pulse Energy (max)	25 mJ (@100 Hz)
Pulse Repetition Rate	500 Hz
Pulse Duration (FWHM)	< 100 ns
Polarization	Linear
Average Current (max)	10 A
Mode of Operation	Pulsed
Beam Quality	$M^2 < 15$
Beam Diameter	2.0
Beam Shape (focus)	top hat like

Cooling Requirements

Coolant	Distilled Water with Algacide and Corrosion Inhibitor
Coolant Temperature	20 to 25 °C
Coolant Flow Rate	≥ 4 lpm
Coolant Pressure	(2 - 5) bar
Required Cooling Power	≥ 780 W @ 25 °C Environment Temperature

Mechanical Dimensions

W x D x H	300 x 120 x 75 mm
Emission Height	47.5 mm
Weight	2.0 kg

Electrical Parameters

Diode Forward Voltage	~ 25 V
Diode Forward Current	max 200 A Pulsed
Average Power Consumption (max)	< 650 W
max Ripple / Overshoot	< 5 %

3m.i.k.r.o.n.TM technology is provided by

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