

High Energy - Short Pulse Q-Switch DPSSL Module



- High intensity 2.81 μm laser
- Nanosecond pulses with up to 25 mJ
- Linearly polarized beam
- Highly efficient diode pumping
- No high-voltage required
- Maintenance free



Specification

Optical Parameters

• Wavelength Range	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	$M^2 < 10$
• Beam Diameter	2.5 mm
• Beam Shape (focus)	Top Hat like

Cooling Requirements

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

Electrical Parameters

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

Mechanical Dimensions

• Dimensions (L x W x H)	(300 x 120 x 75) mm ³
• Weight	5.0 kg