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Mini DPSS Lasers

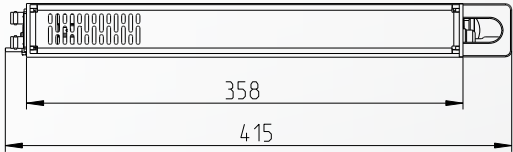
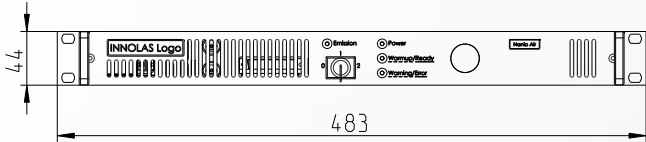
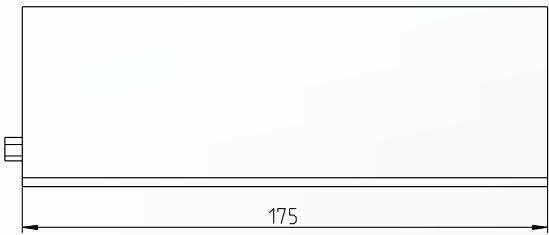
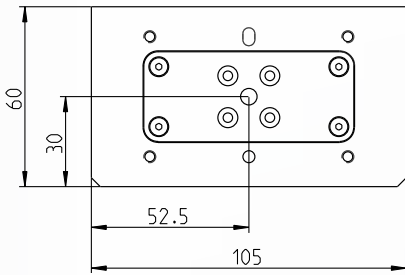


Applications

- * Photovoltaic Manufacturing
- * LED Chip and PCB Marking
- * Stereo Lithography
- * Semiconductor Manufacturing
- * Resistor Trimming

Features

- * Short pulse widths of <math><10\text{ ns}</math>
- * Rugged design for hands-off operation
- * Contact cooling
- * Small footprint
- * Long life pump diode



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Mini DPSS Lasers

Specifications

	1064-6-V	532-5-V	355-1-V
Laser Medium	Nd:YVO ₄	Nd:YVO ₄	Nd:YVO ₄
Wavelength	1064 nm	532 nm	355 nm
Nominal Power	6 W @ 100 kHz	5 W @ 50 kHz	1 W @ 50 kHz
Repetition Rate	Single Shot to 200 kHz	Single Shot to 200 kHz	Single Shot to 200 kHz
Pulse Width	< 13 ns @ 50 kHz	< 12 ns @ 50 kHz	< 12 ns @ 50 kHz
Pulse Energy	100 µJ @ 50 kHz	100 µJ @ 50 kHz	20 µJ @ 50 kHz
Peak Power	> 7.6 kW @ 50 kHz	> 8.3 kW @ 50 kHz	> 1.6 kW @ 50 kHz
Pulse-to-Pulse Stability	< 1 %	< 2 %	< 2 %
Power Stability (rms, 8h)	< 2 %	< 2 %	< 2 %
Spatial Mode	M ² < 1.2, TEM ₀₀	M ² < 1.3, TEM ₀₀	M ² < 1.3, TEM ₀₀
Beam Diameter (at waist)	0.4 mm	0.3 mm	0.2 mm
Waist Location (from output)	-85 mm	-164 mm	-164 mm
Beam Divergence (full angle)	4.0 mrad	2.9 mrad	2.9 mrad
Beam Diameter (at output)	0.5 mm	0.6 mm	0.5 mm
Polarization	Vertical, > 100:1	Horizontal, > 100:1	Vertical, > 100:1
Circularity	> 90 %	> 85 %	> 85 %
Warm-up Time	< 10 min		
Operating Voltage	115-230 VAC ± 10 %, 50-60 Hz, single phase, 24 VDC on request		
Laser Power Consumption	< 170 W		
Cooling	Contact, < 100 W, 40 °C Maximum Base Temperature		
Ambient Temperature	15-35 °C (59-95 °F), non-condensing		
External Control	RS232, USB, TTL and Analog Q-Switch Control		
Dimensions Laser Head	175 x 105 x 60 mm (6.89 x 4.13 x 2.36 in.), L x W x H		
Dimensions Power Supply	408 x 447 x 44 mm (16.06 x 17.6 x 1.73 in.), L x W x H, 19" system, 1 RU high		
Weight Laser Head	1.7 kg (3.7 lbs.)		
Weight Power Supply	6 kg (13.2 lbs.)		

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InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice. InnoLas Laser GmbH is DIN EN ISO 9001 certified.



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