

mosquito*~~X~~

Mini DPSS Lasers

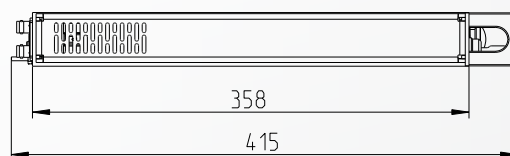
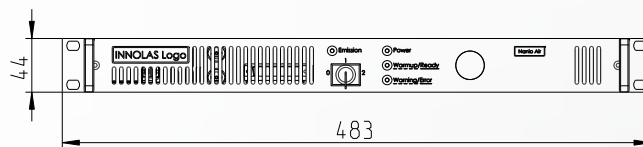
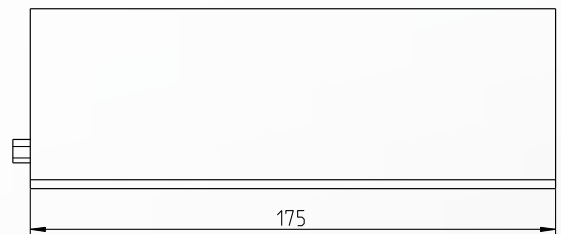
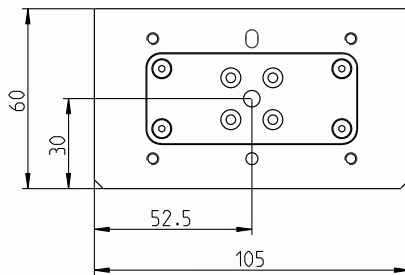


Applications

- * 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



mosquito*~~X~~

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.) | | |

Rev. 1.0, 01/2015

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.



InnoLas Photonics GmbH | Justus-von-Liebig-Ring 8 | 82152 Krailling | Germany
 Phone: +49 (89) 899 360 - 0 | Fax: +49 (89) 899 360 - 16
 E-Mail: info@innolas-photonics.com | Homepage: www.innolas-photonics.com

