

blizz* High Power DPSS Lasers

Superior Reliability. Unprecedented Cost-Performance Ratio.

The BLIZZ is the latest addition to our line-up of Q-switched DPSS lasers, engineered for superior reliability and performance. Coming with a disruptive cost-performance ratio the BLIZZ is made for demanding 24/7 industrial applications that require excellent performance but lowest cost-of-ownership. Based on the field proven NANIO SERIES the BLIZZ's

new design cuts down system costs significantly without any trade-offs in quality or laser lifetime. The rugged laser head comes with an exceptionally small 48 VDC power supply for OEMs or optionally with a 1 RU power supply using the field proven InnoLas Laser Control Interface that is common to all InnoLas Photonics industrial lasers.

Applications

- * Touch Panel Manufacturing
- * Ceramic Scribing
- * CFRP Cutting
- * Solar Cell Manufacturing
- * PCB Cutting

Features

- * Superior pulse-to-pulse stability
- High peak power and short pulse width
- * Compact & rugged industrial design
- * Easy integration and service
- * Compact 48 VDC OEM Power Supply



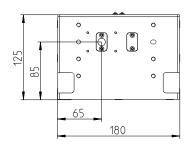


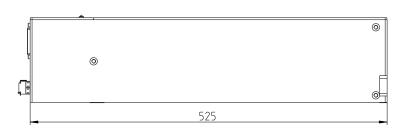
With pulsewidths as short as 20 ns and pulse energies up to 750 μ J, the BLIZZ is the perfect tool for today's demanding applications that require high output power, excellent beam quality and superior pulse-to-pulse stability even at high repetition rates.



Technical Drawing

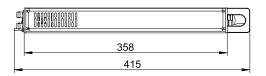
Laser Head



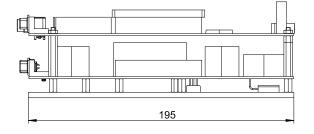


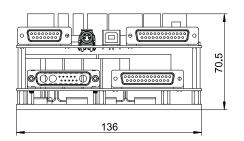
19" Power Supply





OEM Power Supply





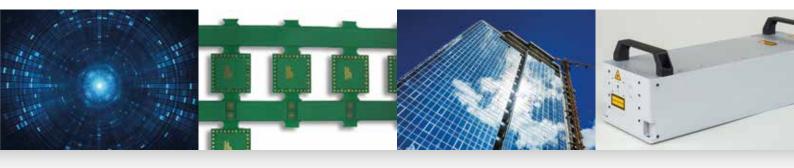


Specifications

BLIZZ 532

Model	532-30-V	532-20-V-300
Laser Medium	Nd:YVO ₄	Nd:YVO ₄
Wavelength	532 nm	532 nm
Nominal Power	30 W @ 40 kHz	20 W @ 300 kHz
Repetition Rate	Single Shot to 400 kHz	Single Shot to 400 kHz
Pulse Width	< 20 ns @ 40 kHz	< 100 ns @ 300 kHz
Pulse Energy	750 μJ @ 40 kHz	67 μJ @ 300 kHz
Peak Power	> 37.5 kW @ 40 kHz	> 0.67 kW @ 300 kHz
Pulse-to-Pulse Stability	<1% @ 40 kHz	< 3% @ 300 kHZ
Power Stability (rms, 8h)	<2%	< 2%
Spatial Mode	M ² < 1.4, TEM ₀₀	M ² < 1.4, TEM ₀₀
Nominal Beam Diameter (at waist)	0.6 mm	0.6 mm
Nominal Waist Location (from output)	-350 mm	-350 mm
Beam Divergence (full angle)	1.6 mrad	1.6 mrad
Nominal Beam Diameter (at output)	0.8 mm	0.8 mm
Polarization	Horizontal , > 100:1	Horizontal, > 100:1
Circularity	> 90 %	> 90 %
Warm-up Time	< 20 min	< 20 min
Operating Voltage	115-230 VAC ± 10%, 50-60 Hz, single phase	115-230 VAC ± 10%, 50-60 Hz, single phase
Laser Power Consumption	< 500 W	< 500 W
Cooling	Water	Water
Ambient Temperature	15-40 °C (59-104 °F), non-condensing	15-40 °C (59-104 °F), non-condensing
External Control	RS232, USB, TTL and Analog Q-Switch Control	RS232, USB, TTL and Analog Q-Switch Control
Dimensions Laser Head (L x W x H)	525 x 180 x 125 mm (20.67 x 7.09 x 4.92 in.)	525 x 180 x 125 mm (20.67 x 7.09 x 4.92 in.)
Dimensions Power Supply (L x W x H)	358 x 447 x 44 mm (14.09 x 17.6 x 1.73 in.) 19" system, 1 RU high	358 x 447 x 44 mm (14.09 x 17.6 x 1.73 in.) 19" system, 1 RU high
Weight Laser Head	20 kg (44.1 lbs.)	20 kg (44.1 lbs.)
Weight Power Supply	6 kg (13.2 lbs.)	6 kg (13.2 lbs.)

InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice. Rev. 1.2, 06/2015. InnoLas Photonics GmbH is DIN EN ISO 9001 certified.

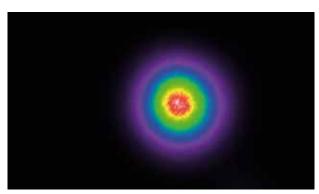


Options & Customization



Available Options

- * Umbilical length 1-10 m
- 45° connectors at the laser head
- Pulse picker AOM
- Beam expander box
- Variable attenuator box
- Scan head adapter flanges
- Water-to-water or water-to-air chiller



Customization

- * Customized laser performance
- Power supply front panel design
- Laser interfacing
- Branded laser control software
- Special laser developments



Since today's demanding applications deserve optimized laser parameters, we do not only sell off-the-shelf products. We can tailor our laser performance, design, interfacing or software to perfectly fit your individual application needs.

