



blizz air* High Power Air-Cooled Lasers

Superior Reliability. Lowest Cost-of-Ownership. No Water.

The BLIZZ AIR 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 AIR is made for demanding 24/7 industrial applications that require excellent performance on an air-cooled laser platform. The new design of the BLZZ AIR 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

- * ID Card Marking
- * Touch Panel Manufacturing
- * 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

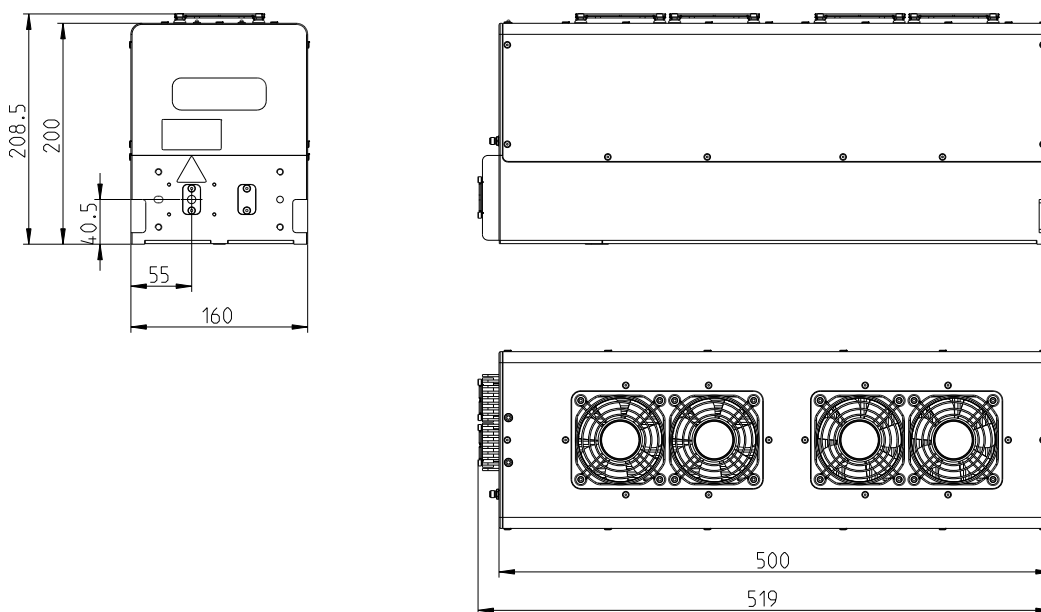


(i) BLIZZ AIR lasers combine excellent performance with lowest cost-of-ownership in an air-cooled design. Output powers up to 30 W and pulse widths below 20 ns enable new high-tech applications with unprecedented reliability.

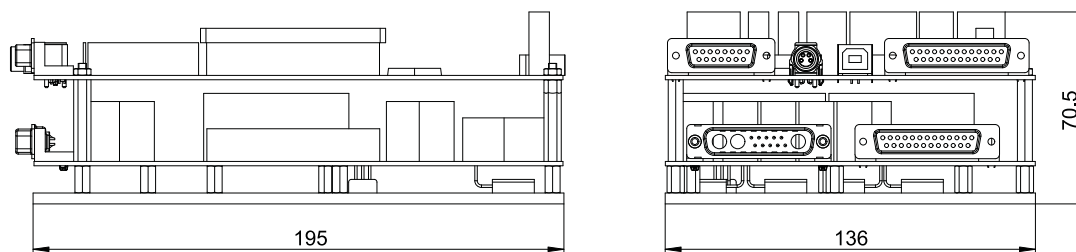


Technical Drawing

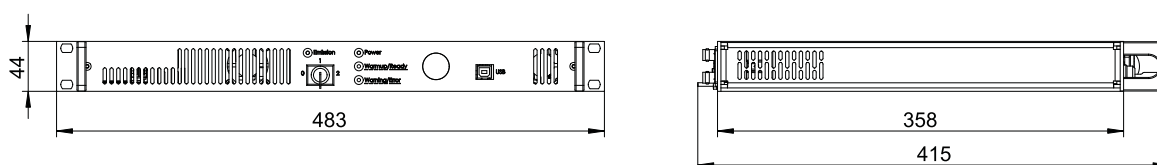
Laser Head



OEM Power Supply



19" Power Supply (optional)



Q-SWITCHED LASERS

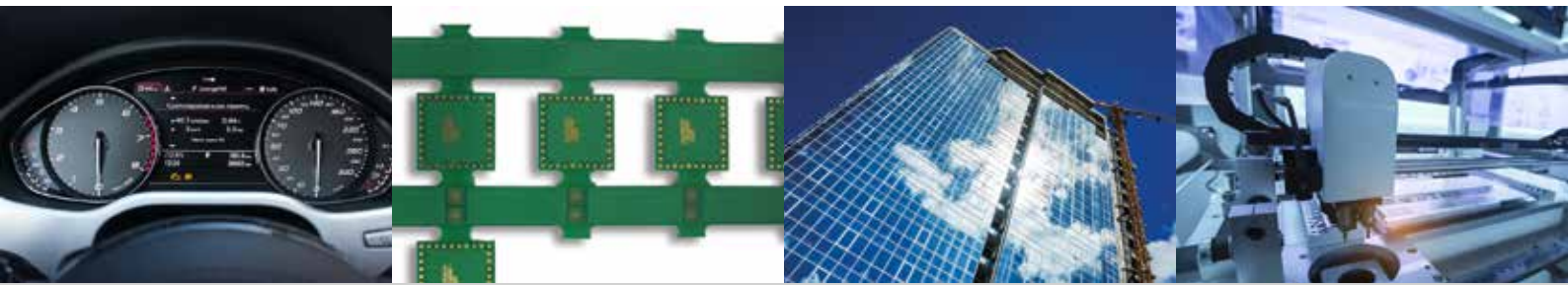


Specifications

BLIZZ AIR

Model	532-25-V	1064-30-V
Laser Medium	Nd:YVO ₄	Nd:YVO ₄
Wavelength	532 nm	1064 nm
Nominal Power	25 W @ 40 kHz	30 W @ 100 kHz
Repetition Rate	Single Shot to 300 kHz	Single Shot to 300 kHz
Pulse Width	< 20 ns @ 40 kHz	< 40 ns @ 100 kHz
Pulse Energy	625 µJ @ 40 kHz	300 µJ @ 100 kHz
Peak Power	> 31 kW @ 40 kHz	> 7.5 kW @ 100 kHz
Pulse-to-Pulse Stability	< 1 % @ 40 kHz	< 1 % @ 100 kHz
Power Stability (rms, 8h)	< 2%	< 2%
Spatial Mode	M ² < 1.3, TEM ₀₀	M ² < 1.2, TEM ₀₀
Nominal Beam Diameter (at waist)	0.5 mm	0.7 mm
Nominal Waist Location (from output)	-400 mm	-250 mm
Beam Divergence (full angle)	1.7 mrad	2.3 mrad
Nominal Beam Diameter (at output)	1.1 mm	1.1 mm
Polarization	Horizontal, > 100:1	Horizontal, > 100:1
Circularity	> 90 %	> 90 %
Warm-up Time	< 20 min	< 20 min
Operating Voltage OEM P/S (standard)	48 VDC	48 VDC
Operating Voltage 19" P/S (optional)	115-230 VAC ± 10%, 50-60 Hz	115-230 VAC ± 10%, 50-60 Hz
Laser Power Consumption	< 500 W	< 500 W
Cooling	Air	Air
Ambient Temperature	15-35 °C, non-condensing	15-35 °C, non-condensing
External Control	RS232, USB, TTL, Analog Q-Switch Control	RS232, USB, TTL, Analog Q-Switch Control
Dimensions Laser Head (L x W x H)	519 x 160 x 210 mm	519 x 160 x 210 mm
Dimensions OEM P/S (standard) (L x W x H)	195 x 136 x 71 mm	195 x 136 x 71 mm
Dimensions 19" P/S (optional) (L x W x H)	358 x 447 x 44 mm, 1 RU high	358 x 447 x 44 mm, 1 RU high
Weight Laser Head	20 kg	20 kg
Weight Power Supply (standard/optional)	2 kg/6 kg	2 kg/6 kg

InnoLas follows a policy of continuous product improvement. All specifications are subject to change without notice. Rev. 1.0, 06/2017. InnoLas Photonics GmbH is DIN EN ISO 9001 certified.

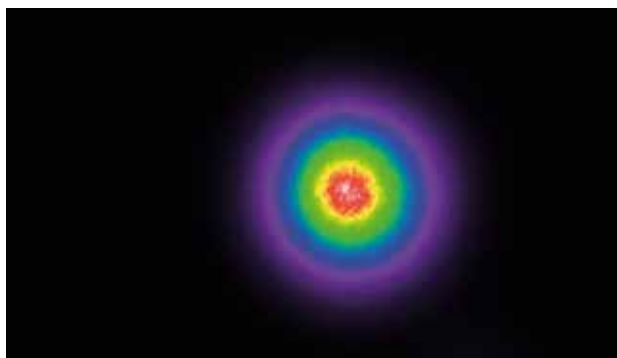


Options & Customization



Available Options

- * Umbilical length 1-10 m
- * 45° connectors at the laser head
- * 19" power supply
- * Beam expander box
- * Variable attenuator box
- * Scan head adapter flanges



Customization

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

(i) 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.

