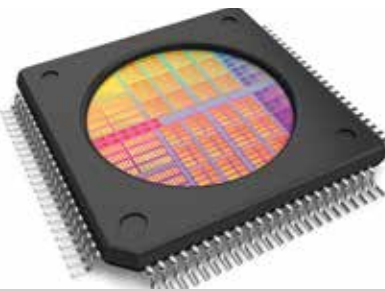
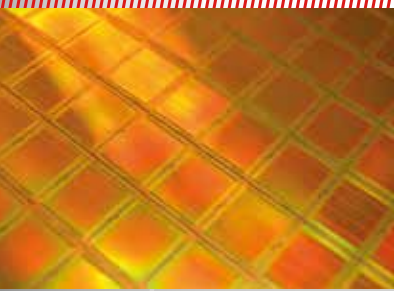


## Q-SWITCHED LASERS



## blizz\* High Power DPSS Lasers

### Superior Reliability. Unprecedented Cost-Performance Ratio.

The BLIZZ is the most powerful Q-switched DPSS laser in our line-up, 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

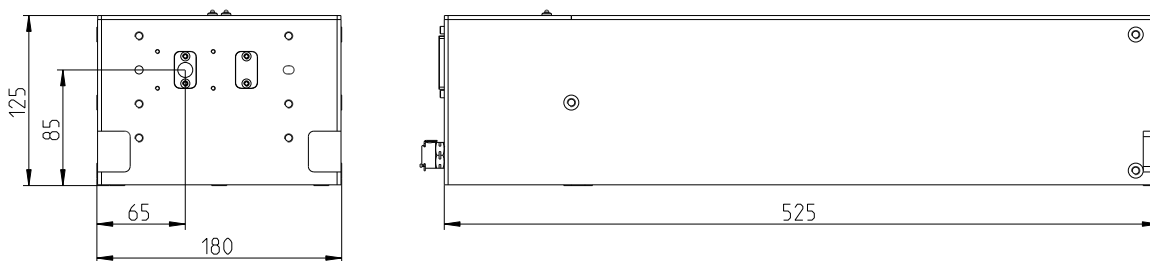


( i ) With pulsewidths as short as 15 ns and pulse energies up to 1,000  $\mu$ J, the BLIZZ is the perfect tool for today's demanding applications that require high output power, excellent beam quality and superior pulse-to-pulse stability even at high repetition rates.

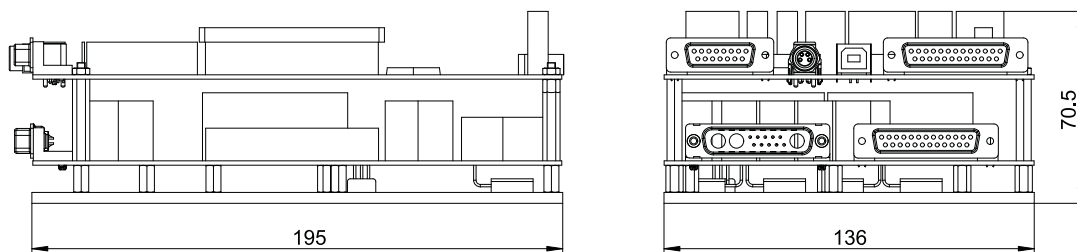


## Technical Drawing

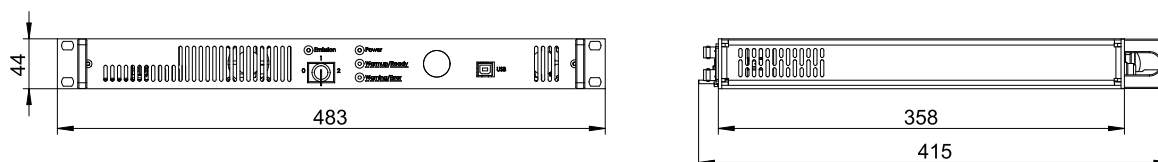
### Laser Head



### OEM Power Supply



### 19" Power Supply (optional)



## Q-SWITCHED LASERS

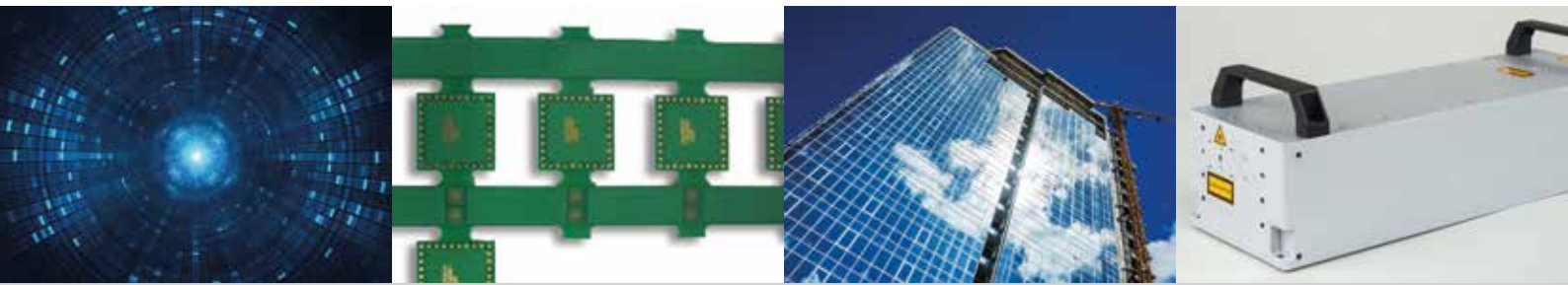


### Specifications

## BLIZZ 532

Model	532-40-V	532-30-V	532-25-V-300
Laser Medium	Nd:YVO <sub>4</sub>	Nd:YVO <sub>4</sub>	Nd:YVO <sub>4</sub>
Wavelength	532 nm	532 nm	532 nm
Nominal Power	40 W @ 40 kHz	30 W @ 40 kHz	25 W @ 300 kHz
Repetition Rate	Single Shot to 400 kHz	Single Shot to 400 kHz	Single Shot to 400 kHz
Pulse Width	< 15 ns @ 40 kHz	< 20 ns @ 40 kHz	< 100 ns @ 300 kHz
Pulse Energy	1,000 µJ @ 40 kHz	750 µJ @ 40 kHz	83 µJ @ 300 kHz
Peak Power	> 66.6 kW @ 40 kHz	> 37.5 kW @ 40 kHz	> 0.83 kW @ 300 kHz
Pulse-to-Pulse Stability	< 1% @ 40 kHz	< 1% @ 40 kHz	< 3% @ 300 kHz
Power Stability (rms, 8h)	< 2%	< 2%	< 2%
Spatial Mode	M <sup>2</sup> < 1.4, TEM <sub>00</sub>	M <sup>2</sup> < 1.4, TEM <sub>00</sub>	M <sup>2</sup> < 1.4, TEM <sub>00</sub>
Nominal Beam Diameter (at waist)	0.35 mm	0.6 mm	0.35 mm
Nominal Waist Location (from output)	-440 mm	-350 mm	-440 mm
Beam Divergence (full angle)	2.5 mrad	1.6 mrad	2.5 mrad
Nominal Beam Diameter (at output)	1.5 mm	0.8 mm	1.5 mm
Polarization	Horizontal, > 100:1	Horizontal, > 100:1	Horizontal, > 100:1
Circularity	> 90%	> 90%	> 90%
Warm-up Time	< 20 min	< 20 min	< 20 min
Operating Voltage OEM P/S (standard)	48 VDC	48 VDC	48 VDC
Operating Voltage 19" P/S (optional)	115-230 VAC ± 10%, 50-60 Hz	115-230 VAC ± 10%, 50-60 Hz	115-230 VAC ± 10%, 50-60 Hz
Laser Power Consumption	< 500 W	< 500 W	< 500 W
Cooling	Water	Water	Water
Ambient Temperature	15-40 °C, non-condensing	15-40 °C, non-condensing	15-40 °C, non-condensing
External Control	RS232, USB, TTL and Analog Q-Switch 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	525 x 180 x 125 mm	525 x 180 x 125 mm
Dimensions OEM P/S (standard) (L x W x H)	195 x 136 x 71 mm	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	358 x 447 x 44 mm, 1 RU high
Weight Laser Head	20 kg	20 kg	20 kg
Weight Power Supply (standard/optional)	2 kg/6 kg	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. 1.3, 06/2017.  
InnoLas Photonics GmbH is DIN EN ISO 9001 certified.

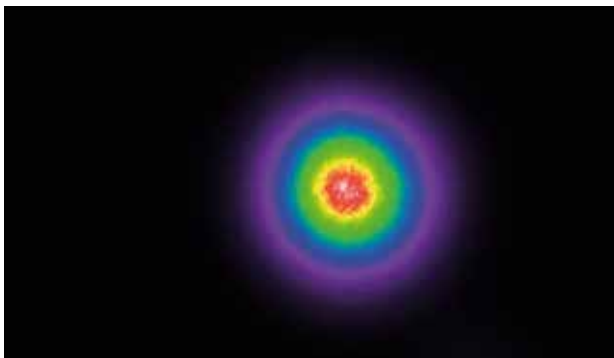


## Options & Customization



### Available Options

- \* Umbilical length 1-10 m
- \* 45° connectors at the laser head
- \* 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

**( 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.

