LUXINAR
Industrial lasers that last

Blizz Air | Nanosecond lasers

High power in an air-cooled design



Excellent performance
Outstanding performance for high-tech applications.

High peak power
High peak power for a wide range of applications like laser marking.

Lowest cost-of-ownership
Developed for demanding OEM applications delivering the lowest cost-of-ownership.

Part of Pulsecore® - Every pulse predictable.

With Pulsecore®, you get absolute process stability for short- and ultrashort-pulse laser manufacturing.

Exceptional performance

Air-cooled high power laser with excellent stability

The Blizz Air short pulse laser series was designed for high precision applications like ID card making. Each laser pulse in the process is precisely controlled to generate brilliant and noiseless pictures and state-of-the art safety features. Power meets precision in the Blizz Air models, making them ideal lasers for high-speed and high-end applications.

Benefits

Short pulse laser for high peak power

The Blizz Air enables high machine throughput without the need for water cooling. Get consistent and precise results at the highest speeds for material processing.

The Blizz Air short pulse laser provides consistent and precise results at highest speeds and minimal heat-affected zones (HAZ).

Applications

Short pulse laser with unprecedented longevity

- ID card marking
- LED or displays manufacturing
- High-speed marking
- Printed circuit board (PCB) cutting, flex or rigid

Advantages

Exceptional short pulse laser performance

The air-cooled Blizz Air short pulse lasers offer the following advantages:

- Superior pulse-to-pulse stability
- Precise pulse control
- High peak power and short pulse width
- Compact and rugged industrial design
- Easy integration and service

Rev. 1.0, 10/2026

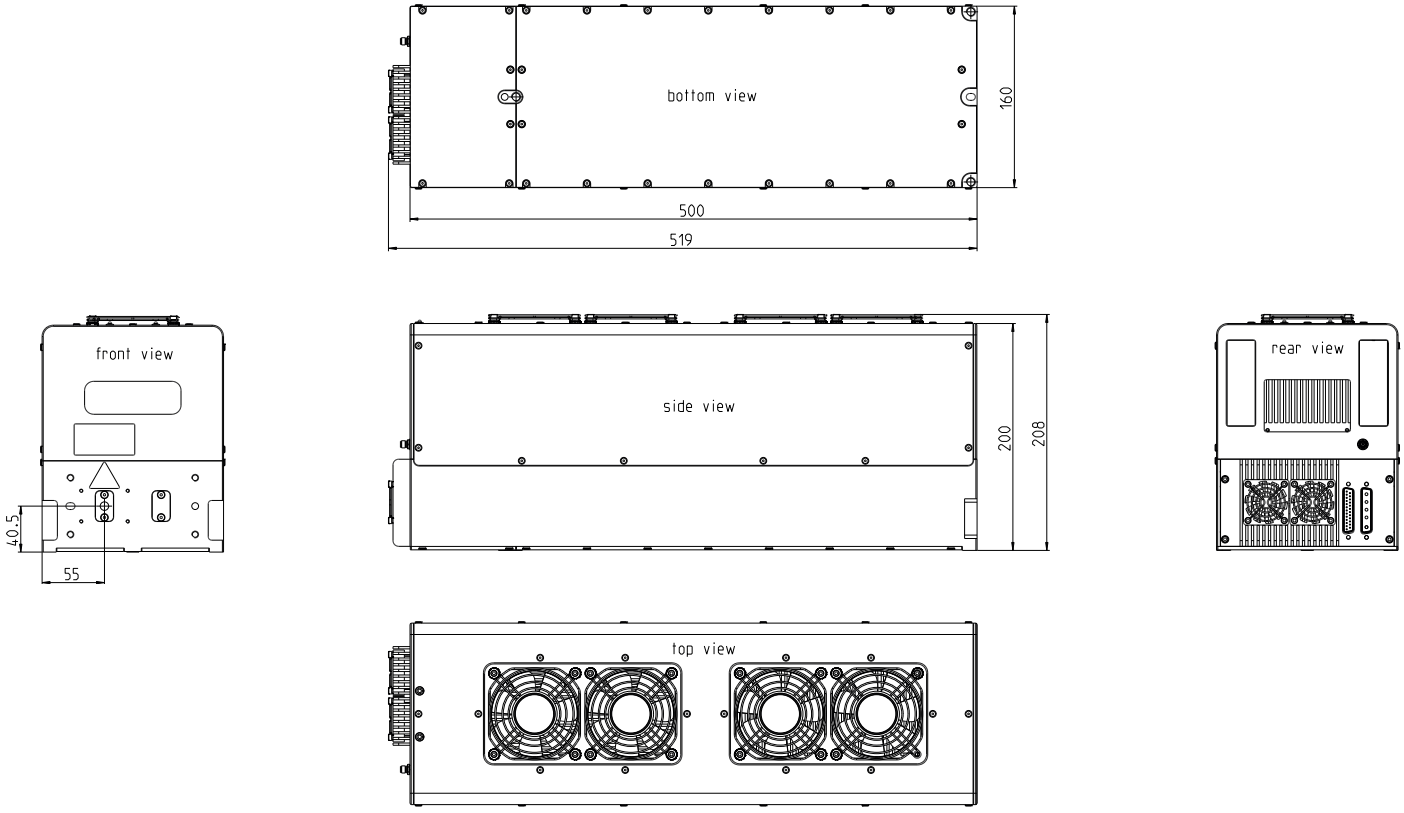
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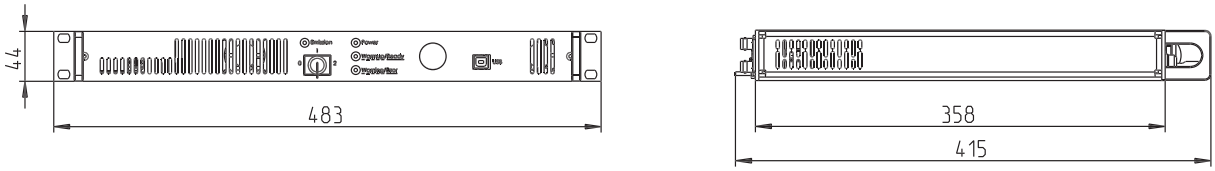
Specifications

Blizz Air	1064
Laser	
Model	1064-30-V
Laser medium	Nd:YVO_4
Central wavelength	1064 nm
Laser performance	
Nominal power	30 W @ 100 kHz
Repetition rate	single shot to 300 kHz
Pulse width	< 40 ns @ 100 kHz
Pulse energy	300 µJ @ 100 kHz
Peak power	> 7.5 kW @ 100 kHz
Pulse-to-pulse stability (rms)	< 1.0 % @ 100 kHz
Power stability (rms, 8 h)	< 2.0 %
Laser beam propagation	
Spatial mode	M^2 < 1.2, TEM_{00}
Nom. beam diameter (at waist)	0.7 mm
Nom. waist location (from output)	-250 mm
Nom. beam diameter (at output)	1.1 mm
Beam divergence (full angle)	2.3 mrad
Polarization	horizontal, > 100:1
Circularity	> 90 %
Operating specifications	
Warm-up time	< 20 min
Operating voltage 19“ control unit (optional)	115 – 230 VAC ± 10 %, 50 – 60 Hz
Laser power consumption	< 500 W
External control	RS232, USB, TTL, analog Q-switch control
Cooling and ambient	
Cooling	air
Ambient temperature	15 – 35 °C, non-condensing
Dimensions and weights	
Dimensions laser head (L × W × H)	519 × 160 × 208 mm^3
Dimensions 19” control unit (L × W × H)	358 × 447 × 44 mm^3, 1 RU high
Weight laser head	20 kg
Weight 19” control unit	6 kg

All values measured after laser warm-up. Luxinar follows a policy of continuous product improvement. All specifications are subject to change without notice. Luxinar Holding GmbH is DIN EN ISO 9001 certified. Rev. 1.0, 10 / 2026 | 903-0328-00

Technical drawings





Industrial lasers that last

VISIBLE AND INVISIBLE LASER RADIATION
AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION
CLASS 4 LASER PRODUCT
DIN EN 60825-1: 2015-7

Luxinar Holding GmbH | sales@luxinar.com | www.luxinar.com

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