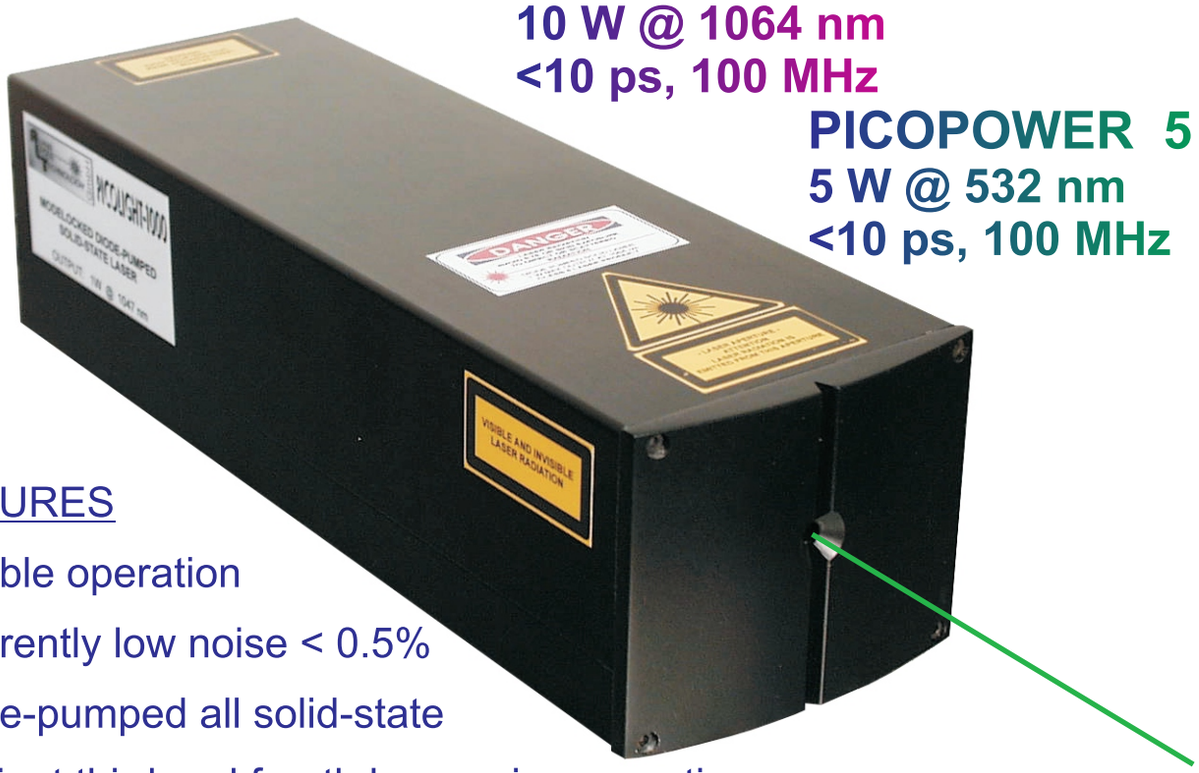
ALPHALAS

Introducing: A new dimension in laser technology -
the most powerful diode-pumped modelocked lasers

PICOPOWER

PICOPOWER 10 IR
10 W @ 1064 nm
<10 ps, 100 MHz

PICOPOWER 5 G
5 W @ 532 nm
<10 ps, 100 MHz



FEATURES

- reliable operation
- inherently low noise < 0.5%
- diode-pumped all solid-state
- efficient third and fourth harmonic generation
- superior to CW frequency doubled green lasers
- powerful ultrashort laser pulses: > 10 kW peak power
- uses a frequency-doubling crystal as the modelocker in the NONLINEAR MIRROR* (Stankov mirror) configuration

* Patent protected

APPLICATIONS

The best laser source for:

- laser TV
- material processing
- scientific research

ALPHALAS GmbH
Bertha-von-Suttner-Str. 5, D-37085 Göttingen, Germany
Tel.: +49-551-7706147, Fax: +49-551-7706146, E-mail: sales@alphalas.com, Web-Site: www.alphalas.com

SPECIFICATIONS OF THE NONLINEAR-MIRROR MODE-LOCKED DIODE-PUMPED SOLID-STATE LASERS

PICOPOWER 10 IR / 5 G

OPTICAL

Active medium	$Nd:YVO_4$
Wavelengths	1064 nm or 532 nm
Pulse duration	< 10 ps (other pulse duration on request)
Repetition rate	100 MHz (other rep. rate on request)
Beam quality	TEM_{00}
Beam diameter ($1/e^2$)	1 mm at the output
Divergence	1 mrad
Pointing stability	40 µrad
CW output power	PICOPOWER 10 IR @1064 nm ≥ 10 W PICOPOWER 5 G @ 532 nm ≥ 5 W
Stability of the output power	<1 % peak-to-peak (24 hours)
Polarization	> 300:1 linear
Optical noise (30 Hz - 2 MHz)	< 0.5%
Life expectancy (pump laser diode)	> 10000 hours

ELECTRICAL

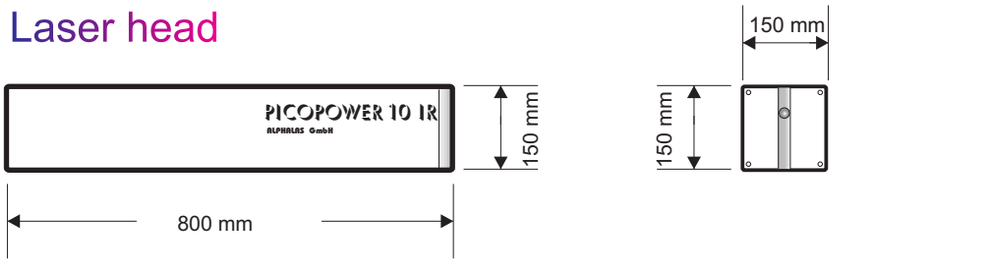
Voltage requirements	85 - 240 V AC, single phase
Power consumption	< 800 W

MECHANICAL

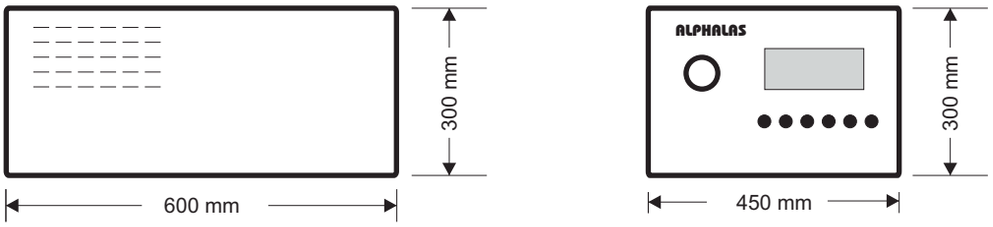
Dimensions laser head	150x150x800 mm³
Dimensions power supply and cooling unit	450x300x600 mm³
Ambient temperature	10° ... 35°C

We reserve the right to change specifications without prior notice.

Laser head



Power supply and cooling unit



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