

## Nd:YAG passively q-switched DPSS lasers

### WAVEGUARD-E



#### FEATURES:

- Robust and compact design
- Internal and external TLL triggering
- Laser controller with USB or RS232 interface
- OEM version available
- Adjustable repetition rate

#### APPLICATIONS:

- Material processing and micromachining
- LIBS
- Marking
- LIDAR and Laser Ranging
- Biophotonics

**Laser characteristics:**

Wavelength	1064 nm <sup>1</sup>
Wavelength tolerance	± 1 nm
Repetition rate	100Hz
Pulse energy	> 400 μJ
Average output power	40 mW
Energy stability (5 hr)	< 1 %
Pulse duration	< 1 ns
Polarization contrast	> 100:1
Beam diameter at exit window	<1 mm
Beam quality	M <sup>2</sup> <1,5
Beam divergence	<5 mRad
Beam profile	TEM <sub>00</sub>

<sup>1</sup>additional harmonics modules for 532 nm, 355 nm or 266 nm wavelengths available on request

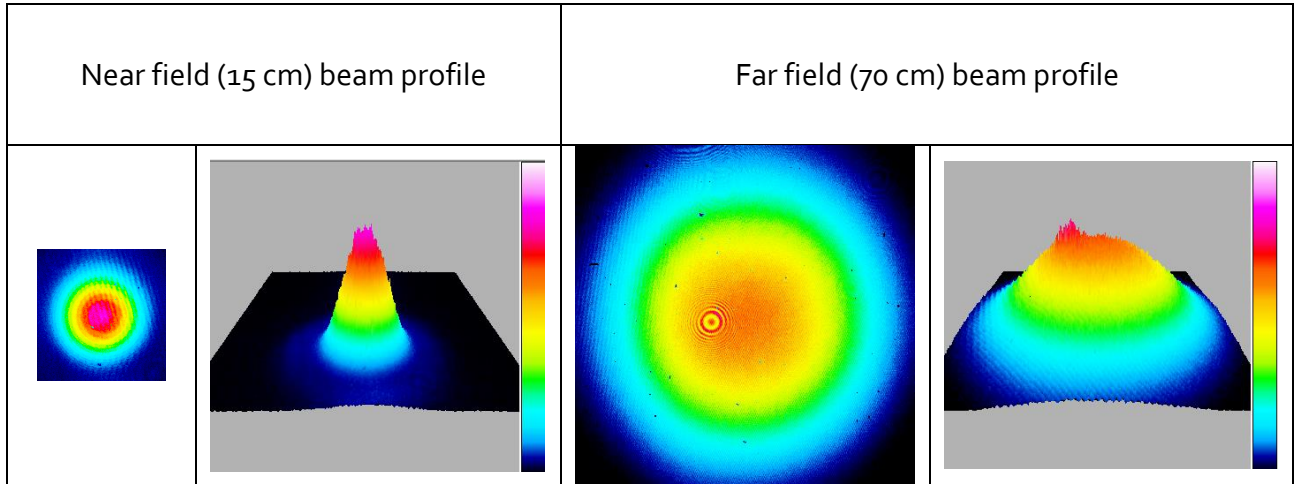
**Physical dimensions:**

Laser module dimensions	170 x 103 x 64 mm
Laser driver dimensions	164 x 105 x 44 mm

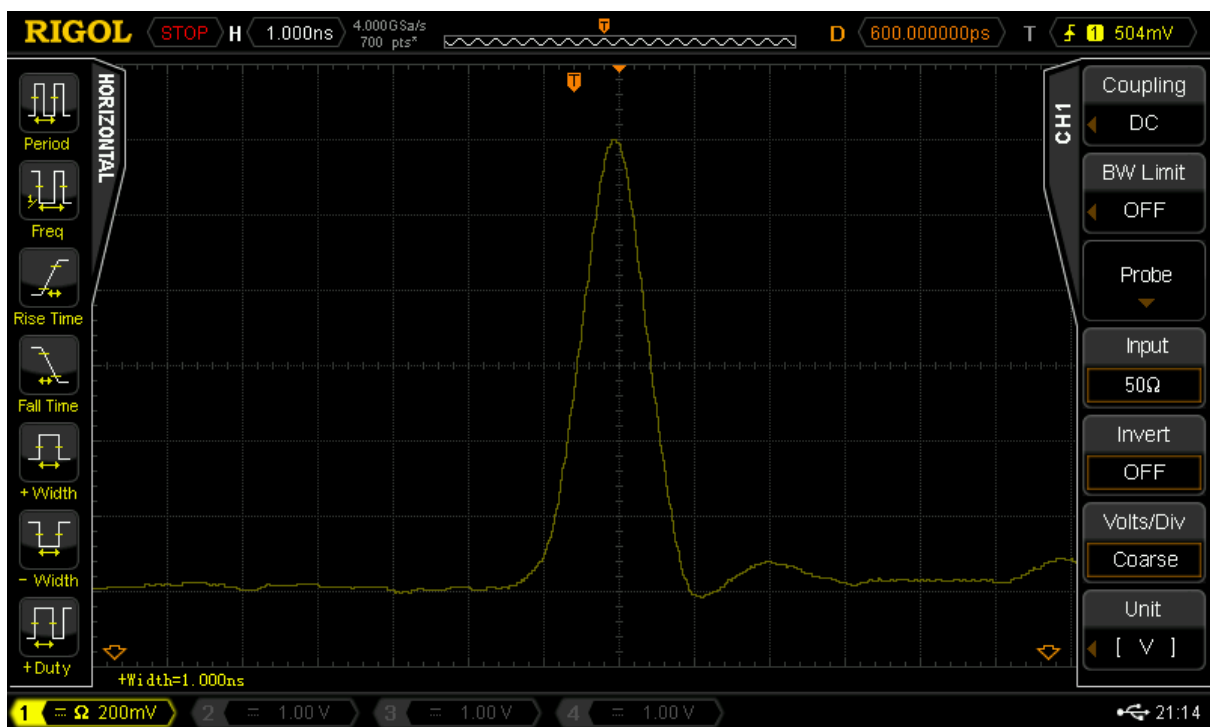
**Utility requirements:**

Pump current	8 - 10 A
Electric	100-240 V AC, 50/60 Hz, 1.4 A
Working temperature	20 – 28 °C
Cooling	TEC element + air cooling

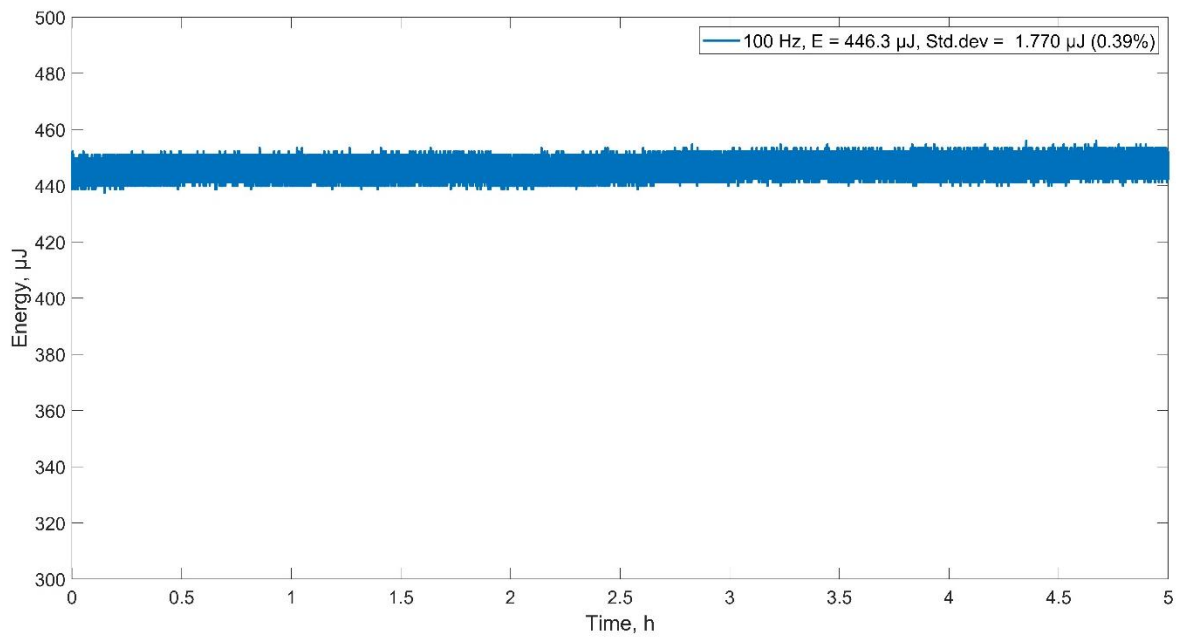
## Laser beam profile data:



## Laser pulse duration data:



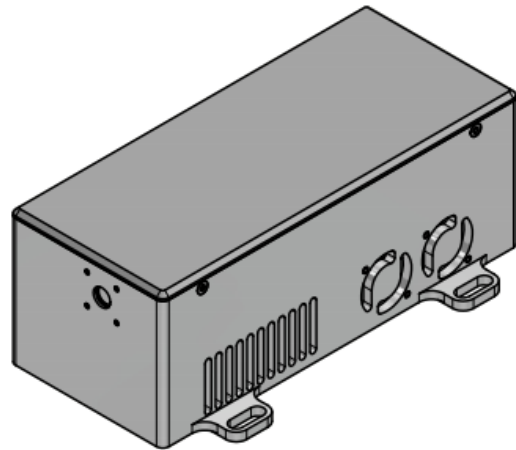
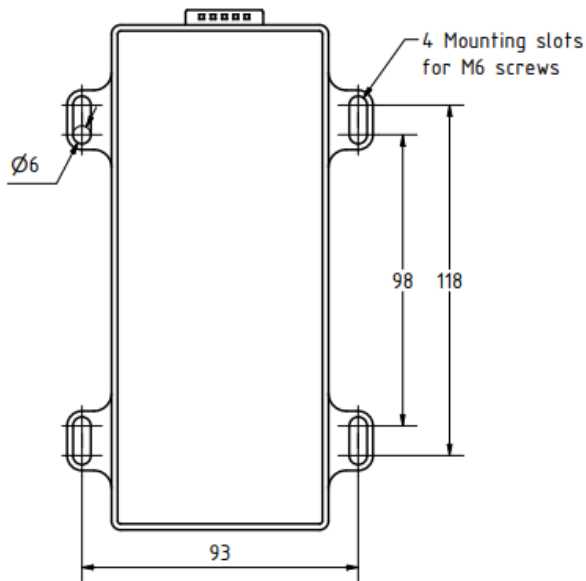
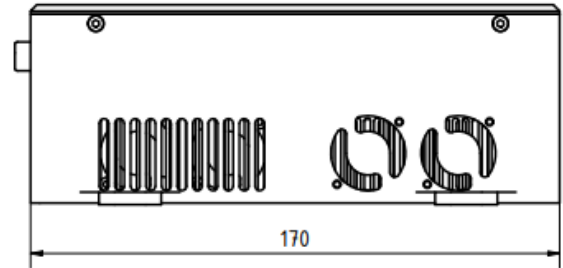
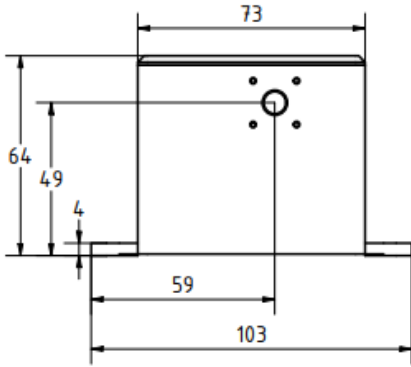
## Average output energy stability:



## Necessary components to run the laser:



Laser head schemes:



Laser safety class:

