



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 ¹
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 ² <1,5
Beam divergence	<5 mRad
Beam profile	TEM ₀₀

¹additional 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

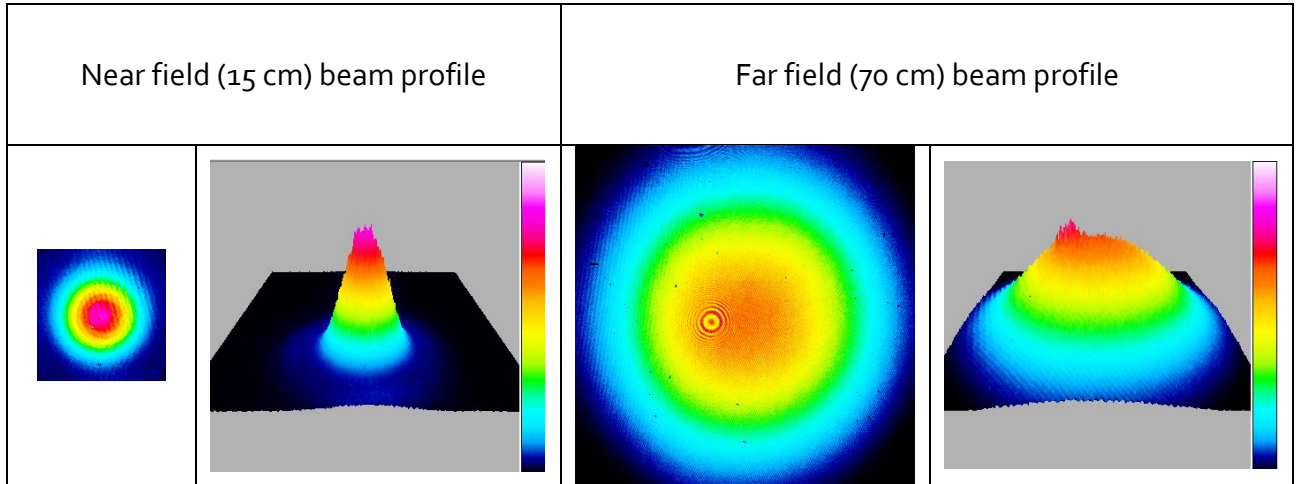
Utility requirements:

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

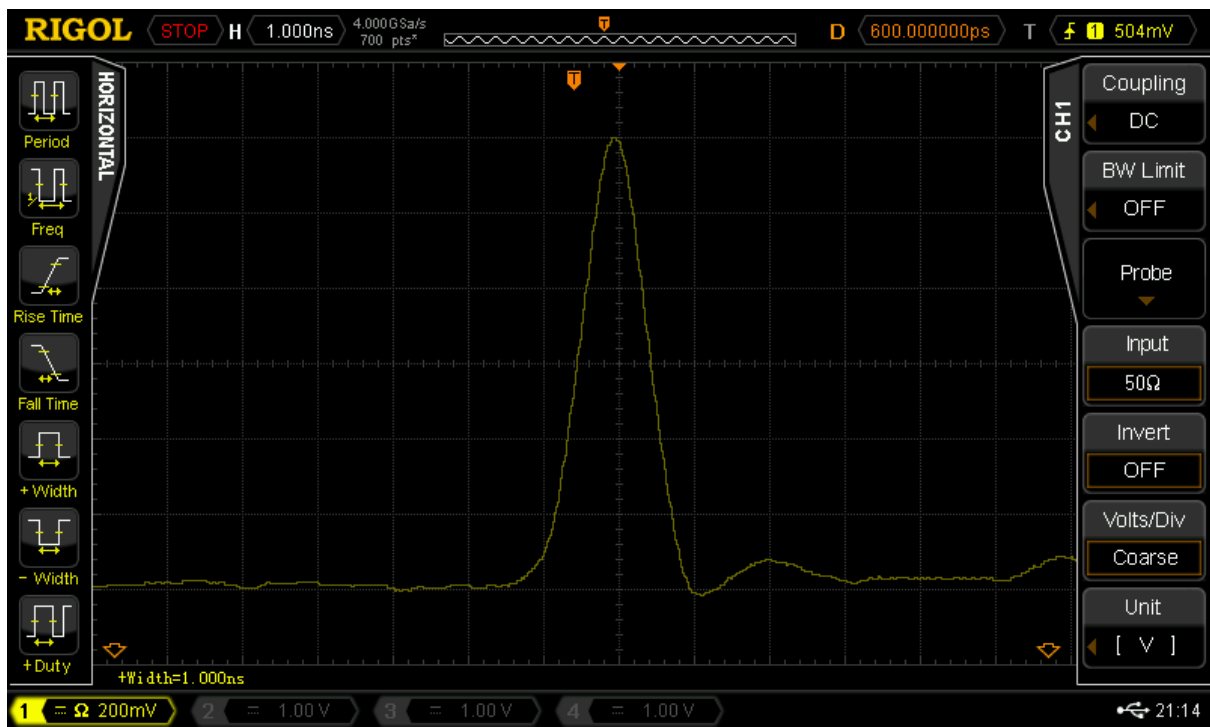




Laser beam profile data:

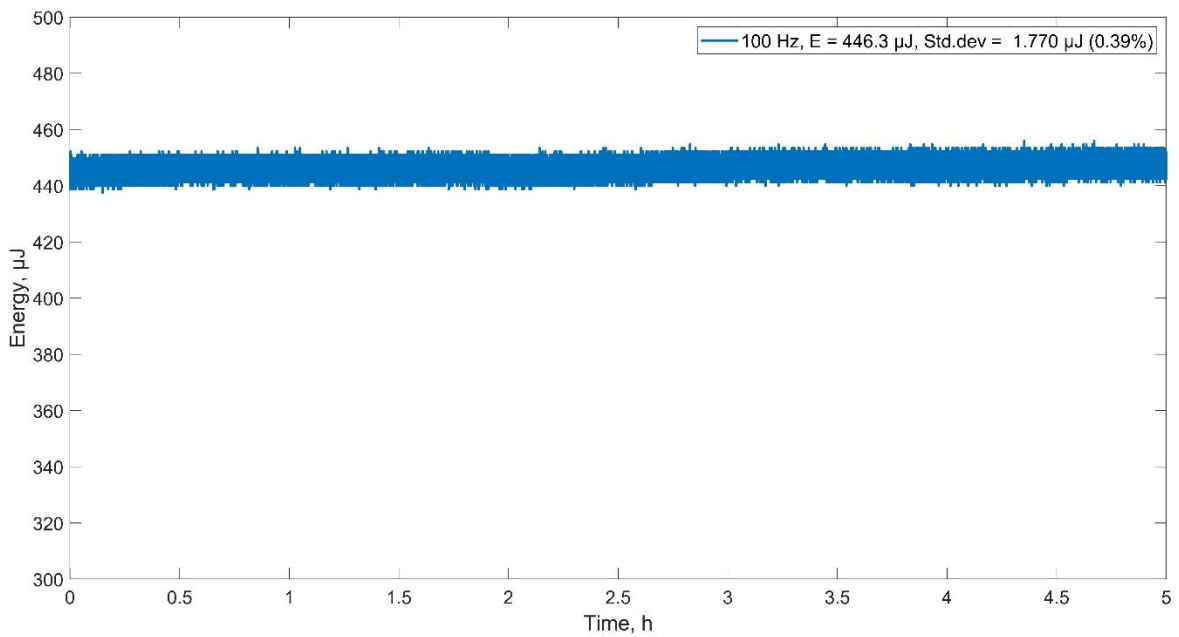


Laser pulse duration data:






Average output energy stability:



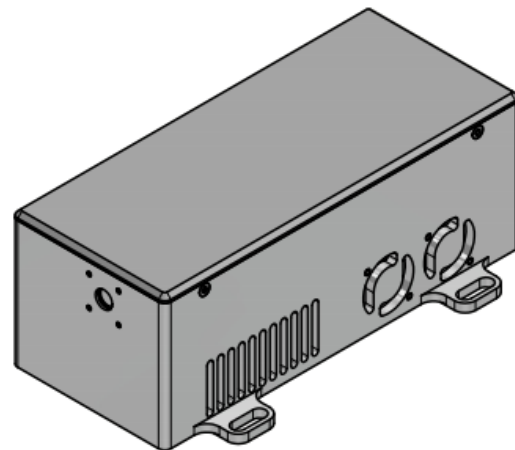
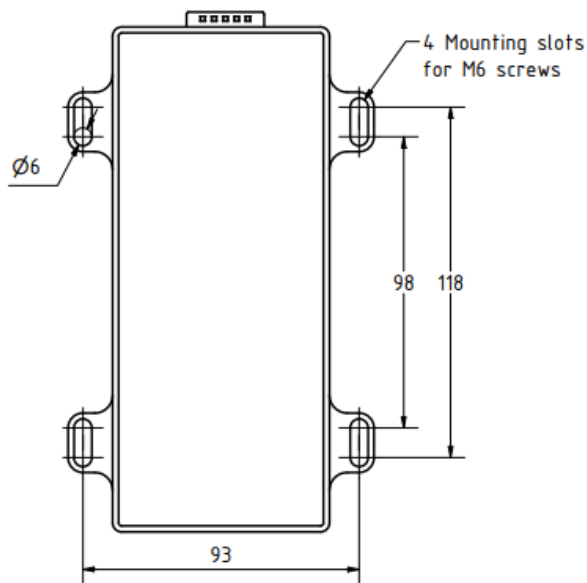
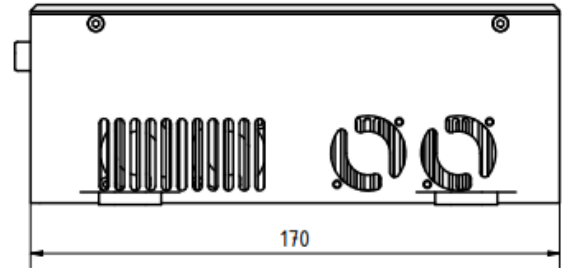
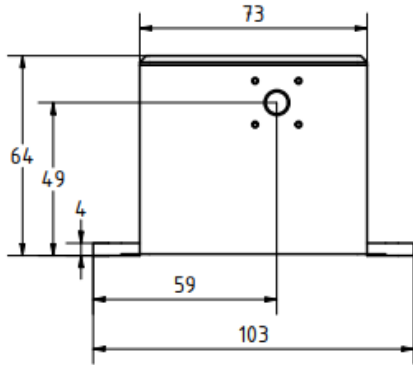
Necessary components to run the laser:

 <p>1064 nm DPSS laser head</p>	 <p>Laser driver</p>
 <p>Power supply with cables</p>	 <p>USB-RS232 adapter</p>





Laser head schemes:



Laser safety class:

