



„Eye-safe“ 1.54 μm ns laser

KAUKAS 3



FEATURES

Compact robust design
High energy per pulse >3 mJ
OEM version available

APPLICATIONS

LIDAR and Laser Ranging
LIBS
Metrology and instrumentation

**Laser specifications:**

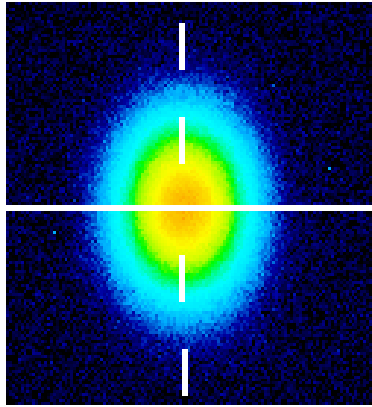
Operating mode	Pulsed
Pulse duration	<8 ns
Repetition rate	SS-1 Hz
Wavelength	1534 nm
Beam divergence, full angle	< 4.5 mRad
Beam profile	TEM ₀₀
Average output energy (-20...+60C°) @1 Hz	>3 mJ
Energy stability Standard Deviation (-20..+60C°) @1Hz	<3 %
Beam diameter at exit window	<1 mm
Beam ellipticity	>0.8
Storage temperature	-40 – +70 °C
Shock resistance test	30 g/6 ms
Vibration resistance test	According to MIL-810G-STD

Physical dimensions:

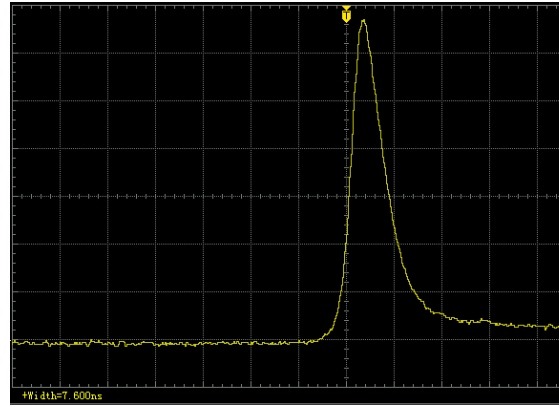
Laser module dimensions	61 x 33 x 29.5 mm (L x W x H)
Laser driver dimensions	124 x 78 x 43 mm (L x W x H)
Power supply dimensions	245 x 105 x 65 mm (L x W x H)

Utility requirements:

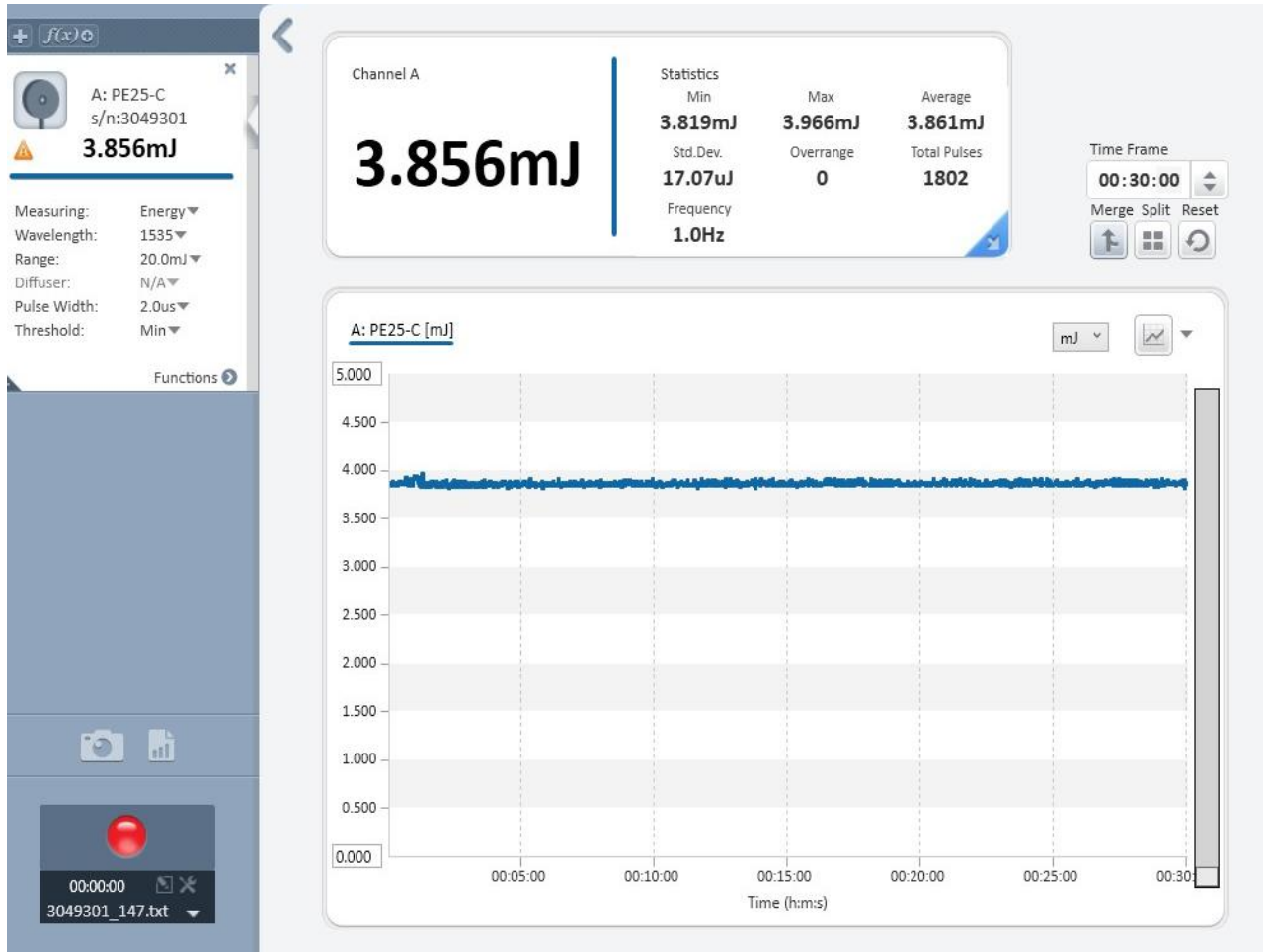
Pump current	100.0 A
Pump duration (-20°C...60°C)	2...3.5 ms
Operating environment temperature	-20 – +60 °C
Cooling	Passive air cooling



Beam profile



Pulse duration

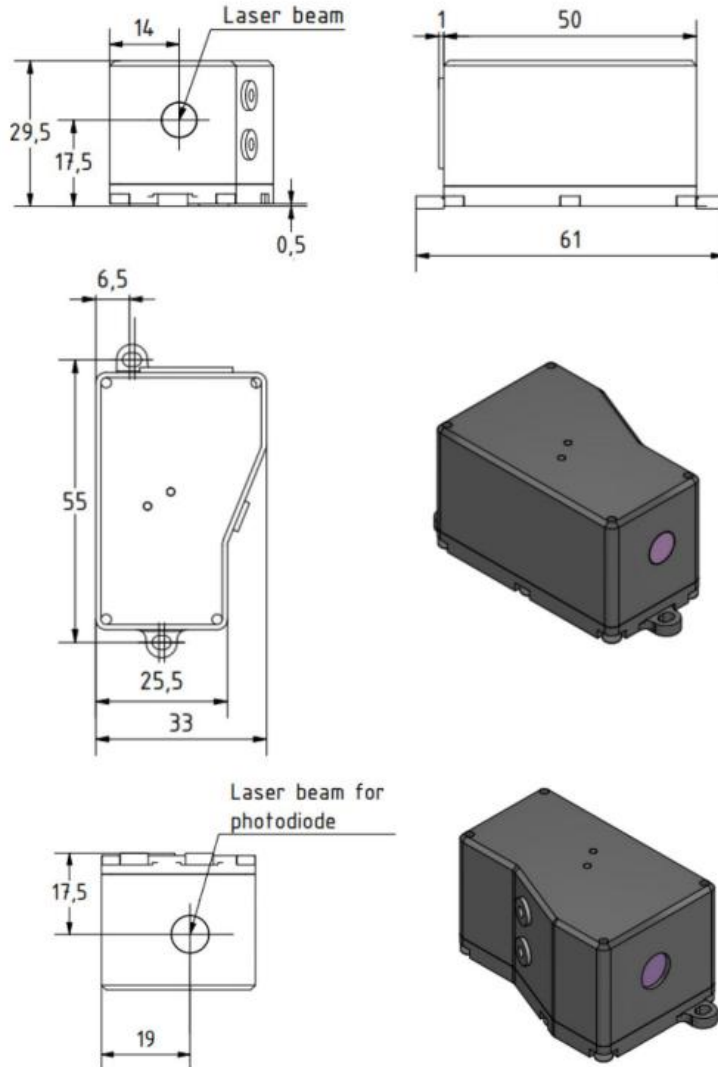


Energy stability @ 1Hz



Drawings

Laser head:



Laser driver:

