

“Eye-safe” 1,54 μm ns laser

KAUKAS 3



FEATURES:

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

APPLICATIONS:

LIDAR and Laser Ranging
LIBS
Metrology and instrumentation

Laser characteristics:

Wavelength	1534 nm
Wavelength tolerance	± 1 nm
Pulse energy	>3 mJ
Average output power	3 mW
Energy stability (2 hr), @1 Hz	<1 %
Pulse duration	<15 ns
Pulse repetition rate	0,5 – 1 Hz
Polarization contrast	>1:80
Beam diameter at exit window	<1 mm
Beam divergence	<5 mRad
Beam profile	TEM ₀₀

Physical dimensions:

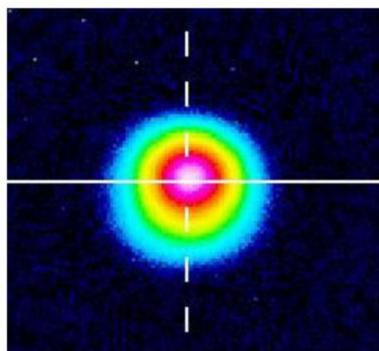
Laser module dimensions	61 x 33 x 29,5 mm (L x W x H)
Laser driver dimensions	128 x 83 x 48 mm (L x W x H)
Power supply dimensions	245 x 105 x 65 mm (L x W x H)

Utility requirements:

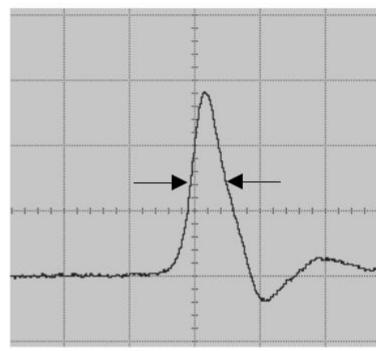
Pump current	<100 A
Pump time	>6 ms
Working temperature	-20 ... +60°C
Cooling	Passive air cooling



Laser beam profile and laser pulse duration data:

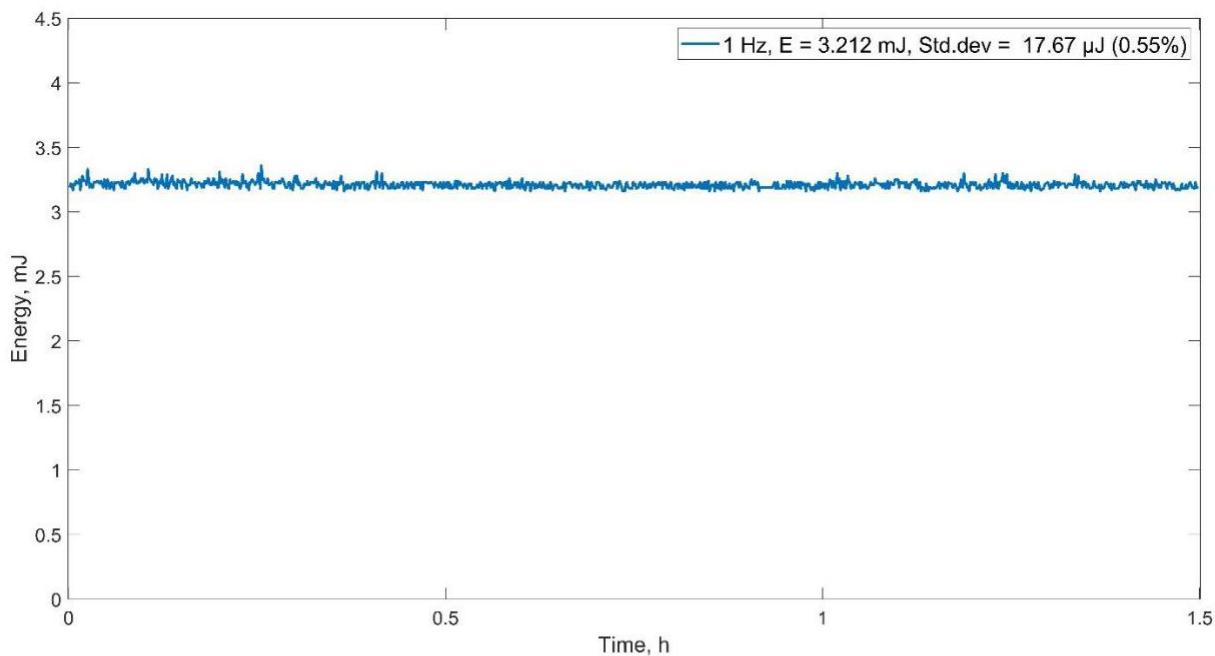


Beam profile at 1 Hz laser repetition rate



12 ns pulse duration at 1 Hz repetition rate

Output energy stability:



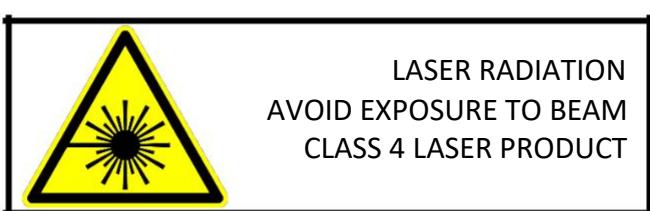
KAUKAS 3 laser average output energy stability for 1 Hz repetition rate at room temperature



Necessary components to run the laser:

	
1534 nm KAUKAS 3 laser	Laser driver
	
Power supply	USB-RS232 adapter

Laser safety class:





Laser head schemes:

