



“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:

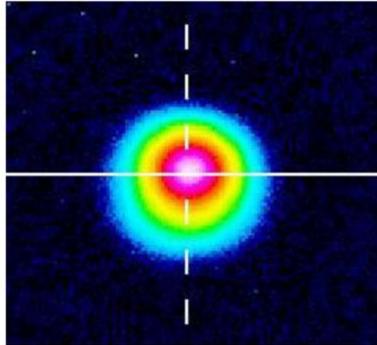
| | |
|-------------------------|-------------------------------|
| Laser module dimensions | 61 x 33 x 29,5 mm (L x W x H) |
| Laser driver dimensions | 128 x 83 x 48 mm (L x W x H) |
| Power supply dimensions | 245 x 105 x 65 mm (L x W x H) |

Utility requirements:

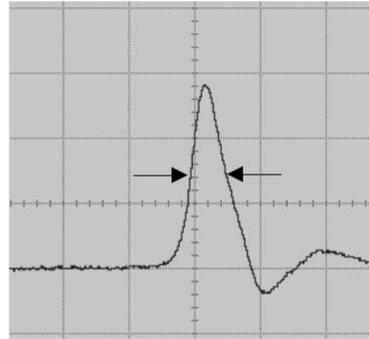
| | |
|---------------------|---------------------|
| Pump current | <100 A |
| Pump time | >6 ms |
| Working temperature | -20 ... +60°C |
| Cooling | Passive air cooling |



Laser beam profile and laser pulse duration data:

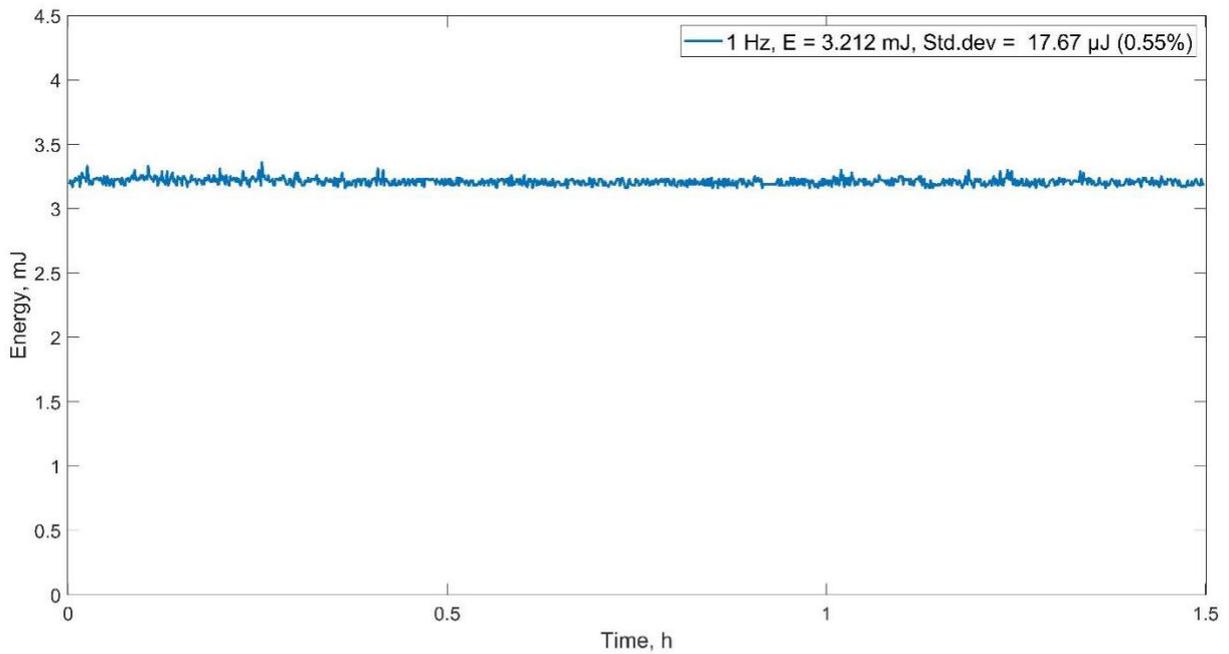


Beam profile at 1 Hz laser repetition rate



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:

| | |
|--|---|
|  |  |
| <p>1534 nm KAUKAS 3 laser</p> | <p>Laser driver</p> |
|  |  |
| <p>Power supply</p> | <p>USB-RS232 adapter</p> |

Laser safety class:





Laser head schemes:

