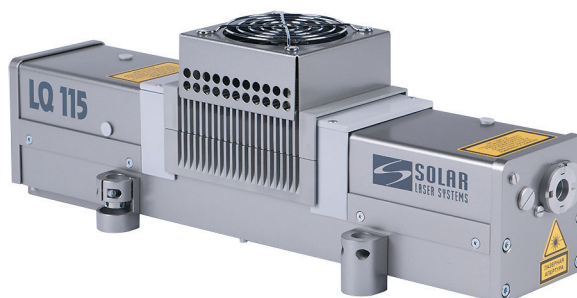


AIR-COOLED FLASHLAMP-PUMPED Nd:YAG LASER

LQ115

The LQ115 laser does not contain a liquid cooling loop but provides excellent user parameters comparable with traditional lasers with water cooling of the flash lamp.



This electro-optically Q-switched nanosecond Nd:YAG laser is an optimal solution if you need a small-footprint unpretentious and reliable laser irrespective of the operating conditions, whether in a laboratory, vehicle environment or industrial equipment.

Continuous operating cycle with high output energy and pulse repetition rate unattainable for conventional convection-cooled lasers is ensured in the LQ115 due to a specially developed high-efficiency heat exchanger integrated into the laser pump chamber.

Flat-top laser beam profile and excellent output energy long-term stability of the LQ115 is attained thanks to a special optical design of the cavity and thermal stabilization of all its main components.

Operation in the VIS and UV spectral range becomes possible due to the second, third and fourth harmonic generators built into the laser head. They are integrated into a temperature-regulated housing for optimum long-term performances.

Compact size of the laser head and power supply (7 and 16 dm³ respectively) provide additional free space whether you operate the device as a stand-alone unit on your optical table or as an OEM module.

Easiness of integration into equipment and mobile platforms is ensured not only by compact dimensions and complete absence of liquid but also by the possibility to power the LQ115 from an 24V DC mains as well as PC control.

FEATURES

- Air cooled
- Pulse energy up to 90 mJ
- Pulse repetition rate up to 5 Hz
- Continuous operation mode
- Built-in harmonic generators
- Turn-key operation
- Compact and portable

APPLICATIONS

- OPO, Ti:Sapphire and Dye laser pumping
- Laser spectroscopy
- Nonlinear optics
- Plasma physics and LIBS
- Materials processing

SPECIFICATIONS *

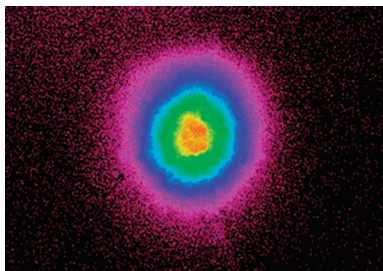
Model	LQ115
Max pulse repetition rate, Hz	5
Pulsed energy, mJ	
at 1064 nm	90
at 532 nm	40
at 355 nm	30
at 266 nm	15
Pulsewidth (FWHM) ¹⁾ , ns	8...12
Beam diameter, mm	< 5
Divergence ¹⁾ , mrad	≤ 3.5
Pulse energy stability (StdDev) ¹⁾ , %	< 6
Electrical service	100...240V, 50/60 Hz
Dimensions, mm:	
Laser Head (LxWxH)	405 x 122 x 138
Power Supply (HxWxD)	153 x 364 x 284

* Specifications are subject to change without notice.

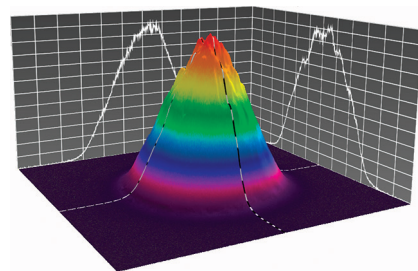
¹⁾ Specified at 1064 nm.

OPTIONS

- 24V DC Power Supply
- External attenuators



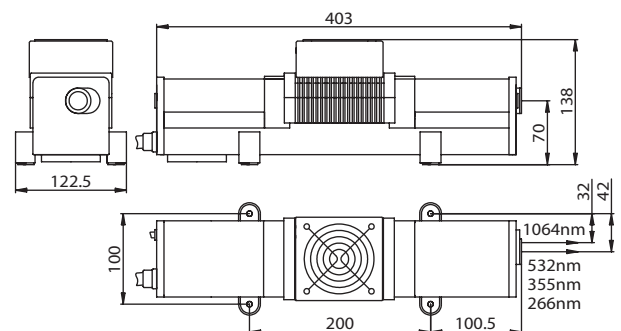
LQ115 laser typical near field beam profile.



LQ115 laser typical far field beam profile.



LQ115 laser equipped with compact power supply.



LQ115 laser head outline drawing.