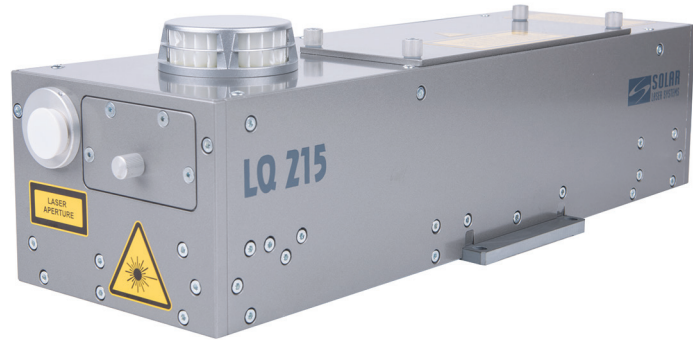


## COMPACT Nd:YAG LASER WITH EXCELLENT BEAM QUALITY LQ215

The LQ215 combines excellent beam quality and increased reliability in a simple and compact design. These features have been quickly and highly estimated by the users – more than 200 such lasers operate day-to-day in the industrial and scientific sectors.



You will be able to concentrate on your work and forget about unpleasant down-time and waiting for service thanks to the industrial design of the LQ215. This laser, specially developed to fit rough industrial operating conditions, perfectly suits for long-term no-failure operation.

You will be sure in precision of your experiments due to the excellent laser beam quality and long-term stability of output parameters ensured by the original optical design of the cavity and fine thermal stabilisation of all the critical laser components.

Your day-to-day convenience in operating this laser will be ensured by such features as built-in harmonic generators, PC control over the laser parameters, easiness of flashlamp replacement, closed-loop water-to-air cooling, powering from an ordinary wall mains, small foot-print and others.

You will minimise the expenses on routine service as the LQ215 flashlamp lifetime is more than 60 million pulses which considerably reduces service intervals as well as your expenses on ownership of this excellent device.

### FEATURES

- Laser pulse energy of 180 mJ
- Pulse repetition rate up to 20 Hz
- Homogeneous flat-top beam profile
- Built-in VIS and UV harmonic generators
- Compact and rugged design
- Turn-key operation

### APPLICATIONS

- OPO, Ti:Sapphire and Dye laser pumping
- Laser spectroscopy
- Nonlinear optics
- Plasma generation and LIBS
- Laser marking and material processing

## SPECIFICATIONS \*

| Model  | LQ215                              |                             |                            |
|--|------------------------------------|-----------------------------|----------------------------|
| Pulse repetition rate, Hz  | 10                                 | 20                          | 30                         |
| Pulse energy, mJ<br>at 1064 nm<br>at 532 nm<br>at 355 nm<br>at 266 nm<br>at 213 nm <sup>1)</sup> | 180<br>100<br>60<br>35<br>10       | 180<br>100<br>50<br>35<br>8 | 150<br>80<br>40<br>25<br>5 |
| Divergence <sup>2)</sup> , mrad  | ≤ 1.5                              |                             | ≤ 2                        |
| Pulsewidth (FWHM) <sup>2)</sup> , ns   | 7                                  |                             |                            |
| Beam diameter, mm  | 5                                  |                             |                            |
| Pulse energy stability (StdDev) <sup>2)</sup> , %  | < 1.5                              |                             |                            |
| Jitter (StdDev) <sup>3)</sup> , ns   | < 1                                |                             |                            |
| Cooling  | Air-water                          |                             |                            |
| Electrical service   | 200...240V, 50/60 Hz, ≤ 800W       |                             |                            |
| Dimensions, mm:<br>Laser Head (LxWxH)<br>Power Supply (HxWxD)                                    | 455 x 165 x 140<br>670 x 330 x 620 |                             |                            |

\* Specifications are subject to change without notice.

<sup>1)</sup> With external LG105 unit.

<sup>2)</sup> Specified at 1064 nm.

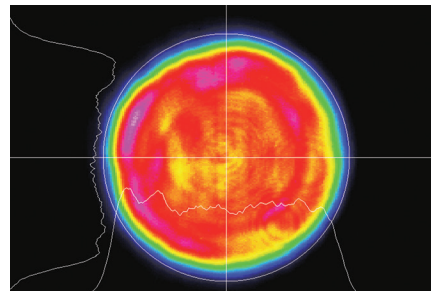
<sup>3)</sup> With respect to QSW IN pulse.

## OPTIONS

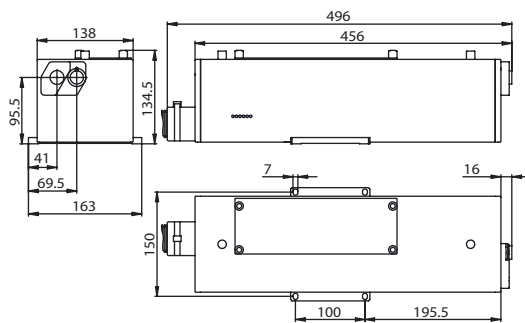
- External attenuators
- TEM<sub>00</sub> mode



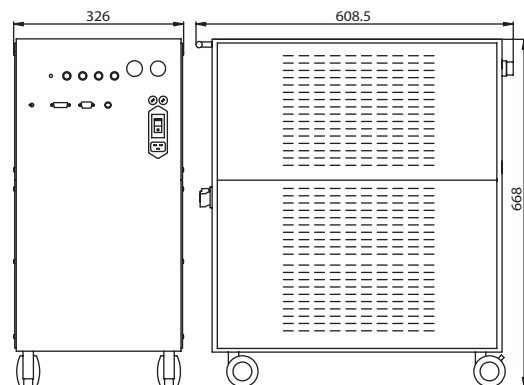
LQ215 Nd:YAG laser with external fifth harmonic generator LG105.



LQ215 laser typical near field beam profile.



LQ215 laser head outline drawing.



LQ215 laser power supply outline drawing.