

# FREQUENCY-DOUBLED, DIODE-PUMPED Nd:YAG LASER

## **MODEL LDP-100MQG**

Multimode

An innovative laser optics design, combined with an industrial-grade power supply, results in an extraordinarily reliable and rugged diode-pumped Nd:YAG laser for industrial or scientific use.

- Efficient diode optical pumping for improved performance and reliability
- High power visible output from small diameter, low divergence beam
- Q-switched pulse stability 1 % rms up to 30 kHz
- Efficient water/water heat exchanger cooling system (self-contained chiller optionally available)
- Uses Intracavity SHG Assembly with LBO harmonic generator crystal
- "CE Mark" Certified; this is a CDRH Class IV laser product

Wavelength	532 nm
Transverse Mode	Multimode
Beam Diameter, nominal	< 2.0 mm
Beam Divergence, nominal	4.0 mr
Polarization	Linear

### Q-switched performance:

Frequency (kHz)	5	10*	20
Average Power (W)	40	50*	48
Pulse Energy (mJ)	8.0	5.0*	2.4
Pulse Width (ns), nominal	150	200*	325
Peak Pulse Power (kW)	53.3	25*	7.4

### Mechanical

Optical Rail Length, standard

Power Station Dimensions

127 cm standard (options dependent)

77 H x 60 W x 85 D cm (water/water cooler)

83 H x 60 W x 85 D cm (air cooled refrigerated)

#### Electrical Power

Recommended Service 220  $\pm$  10% VAC, 1-phase, 50/60 Hz, 20A Average Consumption 2 kW, maximum

Cooling

City water cooled, 8 l/m @ 15° C max. temp.

> 2.5 bar (35 psi) pressure. Chiller requirement 1.5 kW

Self-contained, refrigerated chiller optionally available. 1-kW heat vented into room.

#### Environmental

Temperature, Operating  $18-30^{\circ}$ Temperature, Storage  $5-60^{\circ}$ C Humidity 10-90%, non-condensing



\* Laser is specified at 10 kHz; all other values are typical.

Lee Laser follows a policy of continuous improvement. Specifications are subject to change without notice.

