



FREQUENCY-DOUBLED, DIODE-PUMPED Nd:YAG LASER MODEL LDP-200MQG

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
- Jitter: ± 2.5 ns, measured at 10 kHz full diode current
- Efficient water/water heat exchange cooling system (water-cooled, refrigerated-chiller cooling system 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	2.0 \pm 0.25 mm
Beam Divergence, nominal	5 mr
M ² Value	12
Polarization	Linear, >100:1
Ellipticity	< 1.2:1

Q-switched performance:

Frequency (kHz)	1	3	5	10*	30	50
Average Power (W)	-	-	80	100*	90	90
Pulse Energy (mJ)	-	-	16	10*	3.2	1.8
Pulse Width (ns), nominal	-	-	90	100*	250	350
Peak Pulse Power (kW)	-	-	178	100*	15	5.1

Mechanical

Optical Rail Length, no enclosure	7.86 H x 7.0 W x 43.0 L in.
Optical Rail Length, with enclosure	8.0 H x 7.75 W x 44.5 L in.
Power Station Dimensions, water/water heat exchanger	30.2 H x 23.5 W x 33.5 D in.
Power Station Dimensions, water-cooled or air-cooled refrigerated chiller (Optional)	32.4 H x 23.5 W x 33.5 D in.

Electrical Power

Recommended Service	220 \pm 10% VAC, 1-phase, 50/60 Hz, 30A
Average Consumption	2.8 kW, maximum with water/water cooler
Average Consumption	4.0 kW, maximum with water-cooled refrigerated chiller

Cooling

Water	Facility water, 16 l/m @ 15° C max. temp. Optional water-cooled refrigerated chiller requires facility water: 8 l/m @ 25° C max. temp.
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Environmental

Temperature, Operating	18 - 35°C
Temperature, Storage	5 - 60°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.*

