



TEM₀₀-MODE, DIODE-PUMPED Nd:YAG LASER at 532 nm

MODEL LDP-100TQG-DP

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 use. A TOTALLY SOLID-STATE LASER for TROUBLE-FREE MANUFACTURING !

- Efficient diode optical pumping for improved performance and reliability
- High power visible output from small diameter, low divergence beam
- Highly circular TEM₀₀-mode beam profile
- Q-switched pulse stability 1% rms up to 30 kHz
- Uses Intracavity SHG Assembly with LBO harmonic generator crystal
- Water/water heat exchanger cooling system (self-contained chiller optionally available)
- "CE Mark" Certified; this is a CDRH Class IV laser product

Wavelength	532 nm
Transverse Mode	TEM ₀₀
Beam Diameter, nominal	.8 mm
Beam Divergence, nominal	1.5 mr
Polarization	Linear

Q-switched performance:

Frequency (kHz)	5	10	20
Average Power (W)	10	12	10
Pulse Energy (mJ)	2.0	1.2	0.5
Pulse Width (ns), nominal	90	100	150
Peak Pulse Power (kW)	22	12	3.3

Mechanical

Optical Rail Length, standard	127 cm standard
Power Station Dimensions	83H x 60W x 85D cm (with refrigerated chiller)

Electrical Power

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

Cooling

Internal, water/water cooler	City water cooled, 8 l/m @ 15° C max temp Self-contained, refrigerated chiller optionally available. 1-kW heat vented into room.
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Environmental

Temperature, Operating	18-30°C
Temperature, Storage	5 - 60°C
Humidity	10 – 90%, non-condensing



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

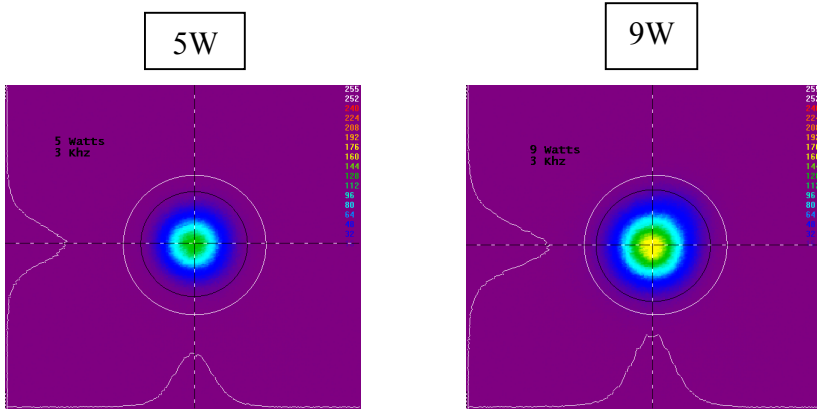
*Lee Laser follows a policy of continuous improvement.
Specifications are subject to change without notice.*



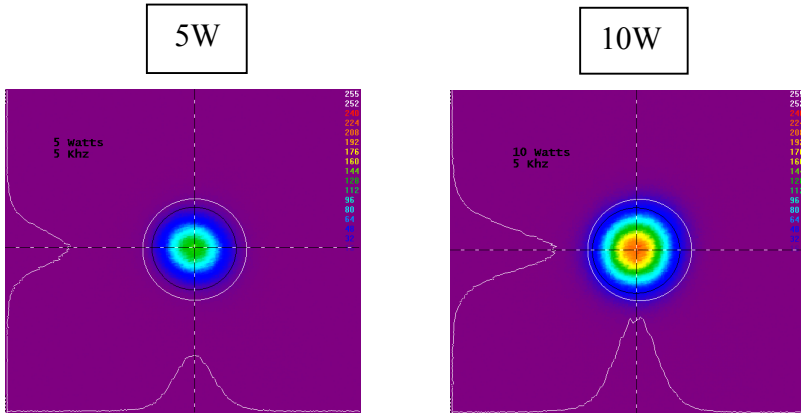


Beam Profiles for the LDP-100TQG-DP – TEM₀₀ Mode Laser @

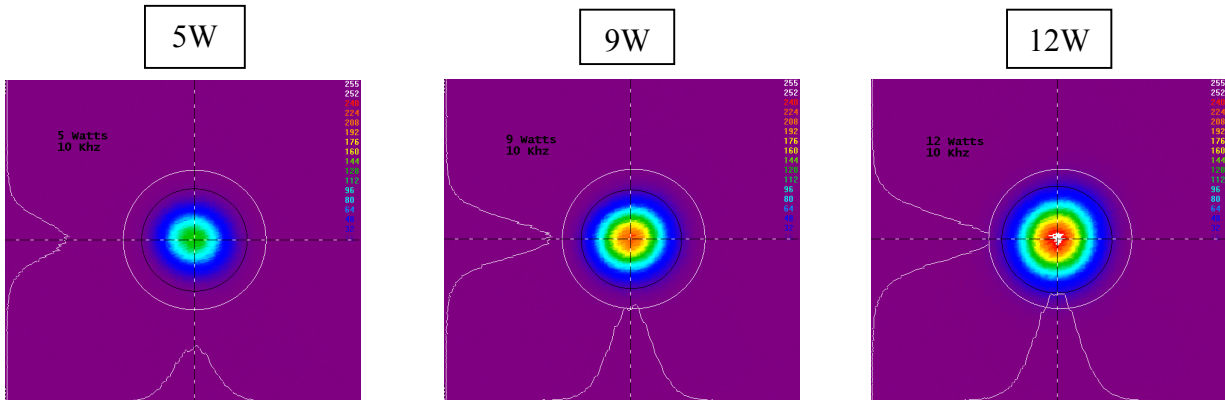
3kHz Data



5kHz Data



10kHz Data





**New Packaging For Series MQG (532 nm)
And
Microprocessor Control (MPC) Detail**



New Power Supply Paint Scheme For All 1064 nm & 532 nm LDP Lasers



Microprocessor Control (MPC)