



HIGH POWER, DIODE-PUMPED CW Nd:YAG LASER

MODEL LDP-100TQ

TEM₀₀ Mode

An innovative laser optics design, combined with an industrial-grade power supply, results in a 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 from small diameter, low divergence beam
- Highly circular TEM₀₀-mode beam profile
- Q-switched pulse stability < 5% peak-peak up to 10-kHz
- Water/water heat exchanger cooling system (self-contained chiller optionally available)
- "CE Mark" Certified; this is a CDRH Class IV laser product

Wavelength	1064 nm
Transverse Mode	TEM ₀₀
Beam Diameter, nominal	1.1 mm
Beam Divergence, nominal	1.6 mr
Polarization	Random
M ² Value	1.3

Q-switched performance:

Frequency (kHz)	
Average Power (W)	
Pulse Energy (mJ)	
Pulse Width (ns)	
Peak Pulse Power (kW)	

CW	5	10*	20		
18	15	15*	15		
	3.0	1.5*	0.75		
	85	150*	250		
	35.3	10*	3.0		

Mechanical

Optical Rail Length, options dependent	131 cm standard
Power Station Dimensions	83H x 60W x 85D cm

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.
------------------------------	---

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.*

