

Diode-Pumped Pulsed Nd:YAG Laser

Model LDPP-200M

(Preliminary)

An innovative, diode-pumped Nd:YAG laser designed specifically for light-duty cutting and drilling applications that require up to 200 Watts average power. Another highly-reliable, industrial-grade Nd:YAG laser product from Lee Laser.

- Ultra-fast pulse rise- and fall-times for HAZ-free cutting and drilling applications
- 9,500-pps pulse rate for high production throughput
- Programmable microprocessor controller to select internal performance parameters
- Interface circuit for computer control of pulse energy, pulse width and pulse rate
- "CE Mark" Certified; this is a CDRH Class IV laser product

Wavelength 1064 nm
Transverse Mode Multimode
Beam Diameter < 2.5 mm

Beam Divergence (full angle) nominal 10 mr at 200 Watts

Polarization Random

Performance

 $\begin{array}{lll} \mbox{Average Power, maximum} & 200\mbox{-Watts} \\ \mbox{Pulse Rate, maximum} & 9500\mbox{ pps} \\ \mbox{Pulse Energy, maximum} & > 200\mbox{ mj} \\ \mbox{Pulse Width Range} & 1\mbox{-}200\mbox{ }\mu\mbox{s} \\ \end{array}$

Average Power (Watts) at Pulse Frequency (kHz):

| cy (kHz): | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 7.0 |
|-------------|-----|-------|-------|-------|-----|-----|
| | kHz | kHz | kHz | kHz | kHz | kHz |
| Pulse Width | | | | | | |
| 10-μs | | | | | | 85 |
| 20 μs | | 35 | | | | |
| 35 μs | | | | | 200 | |
| 50 μs | | 115 | | > 200 | | |
| 65 µs | | | > 200 | | | |
| 100 μs | 115 | > 200 | | | | |
| 200 us | 200 | | | | | |
| | | | | | | |

Mechanical

Optical Rail Length, (options dependent) 130 cm

Power Station Dimensions 77H x 60W x 85D cm (with water/water cooler)

Electrical Power

Recommended Service $220 \pm 10\%$ VAC, 1-phase, 50/60 Hz, 30A

Maximum Consumption 4.5-kW

Water City water cooled, 24 l/m @ 15° C max.

Environmental

Temperature, Operating 18 - 30°C Temperature, Storage 5 - 60°C

Humidity 10-90%, non-condensing



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

