



## HIGH POWER, DIODE-PUMPED Nd:YAG LASER MODEL ILM-500MQ

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 output from small diameter, low divergence beam**
- **Highly circular multimode beam profile**
- **Q-switched pulse stability < 5% rms up to 10 kHz**
- **Efficient water/water heat exchanger cooling system**
- **"CE Mark" Certified; this is a CDRH Class IV laser product**

Wavelength: 1064 nm  
 Transverse Mode: Multimode  
 Beam Diameter, nominal: 3.5 mm  
 Beam Divergence (full angle), nominal: 12.0 mRad  
 Polarization: Random

### Q-switched Performance:

Frequency (kHz):	6	10*
Average Power (W):	350	400*
Pulse Energy (mJ):	58	40*
Pulse Width (ns), nominal:	< 65	< 80*
Peak Pulse Power (kW):	≥ 897.4	≥ 500*

### Mechanical:

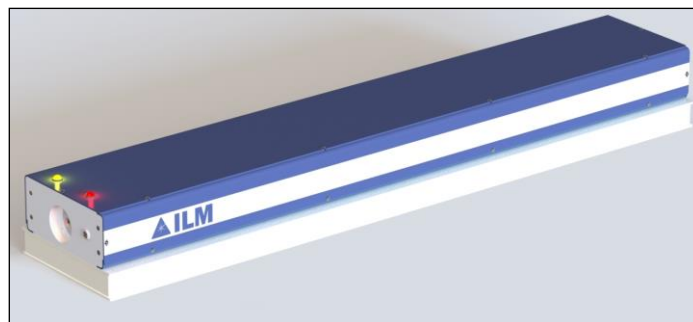
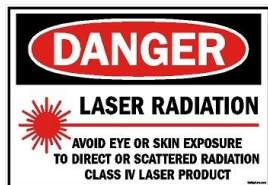
Optical Rail Length, standard: 1524 mm  
 Power Station Dimensions: 876H x 521W x 470D mm

### Electrical Power:

Recommended Service: 220 +/- 10% VAC, 1-phase, 50/60 Hz, 20A  
 Average Consumption: 4.6 kW, maximum

### Water:

Internal, water/water cooled: City water cooled, 8 L/m @ 16° C max temp. Self-contained refrigerated chiller optionally available.



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

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