



## FREQUENCY DOUBLED, DIODE-PUMPED Nd:YAG LASER MODEL ILM-50MQG

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**
- **Q-switched pulse stability 1% rms up to 30 kHz**
- **Efficient water/water heat exchanger cooling system**
- **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, nominal: ≤ 1.5 mm  
 Beam Divergence (full angle), nominal: ≤ 3.0 mRad  
 Polarization: Linear

**Q-switched Performance:**

Frequency (kHz):	5	10*	20	30
Average Power (W):	20	25*	22	20
Pulse Energy (mJ):	4.0	2.5*	1.1	0.7
Pulse Width (ns), nominal:	160	200*	270	350
Peak Pulse Power (kW):	25	12.5*	4.1	1.9

**Mechanical:**

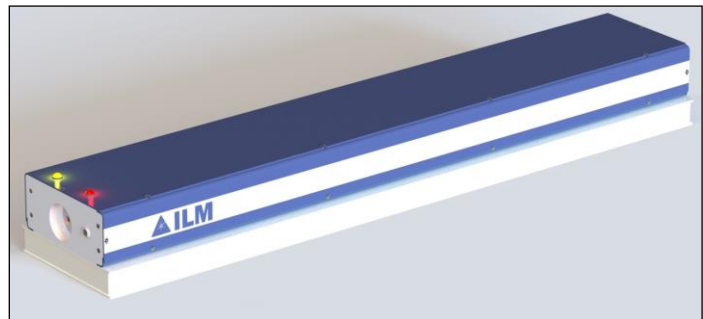
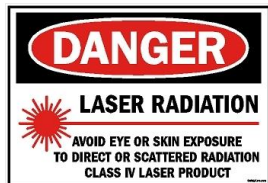
Optical Rail Length, standard: 1219 mm  
 Power Station Dimensions: 876H x 521W x 470D mm

**Electrical Power:**

Recommended Service: 220 +/- 10% VAC, 1-phase, 50/60 Hz, 20A  
 Average Consumption: 2 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.