



## 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!

#### Features:

- 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
- Customer interfaces include: Ethernet, serial, wireless
- "CE Mark" Certified; this is a CDRH Class IV laser product

#### Applications:

- Aerospace
- Diamond Cutting
- Medical
- Semiconductor
- Scientific
- Entertainment

Beam Attributes	
Wavelength	1064 nm
Transverse Mode	Multimode
Beam Diameter, nominal	3.5 mm (before beam expansion)
Beam Divergence (full angle), nominal	≤ 12.0 mRad (before beam expansion)
Polarization	Random

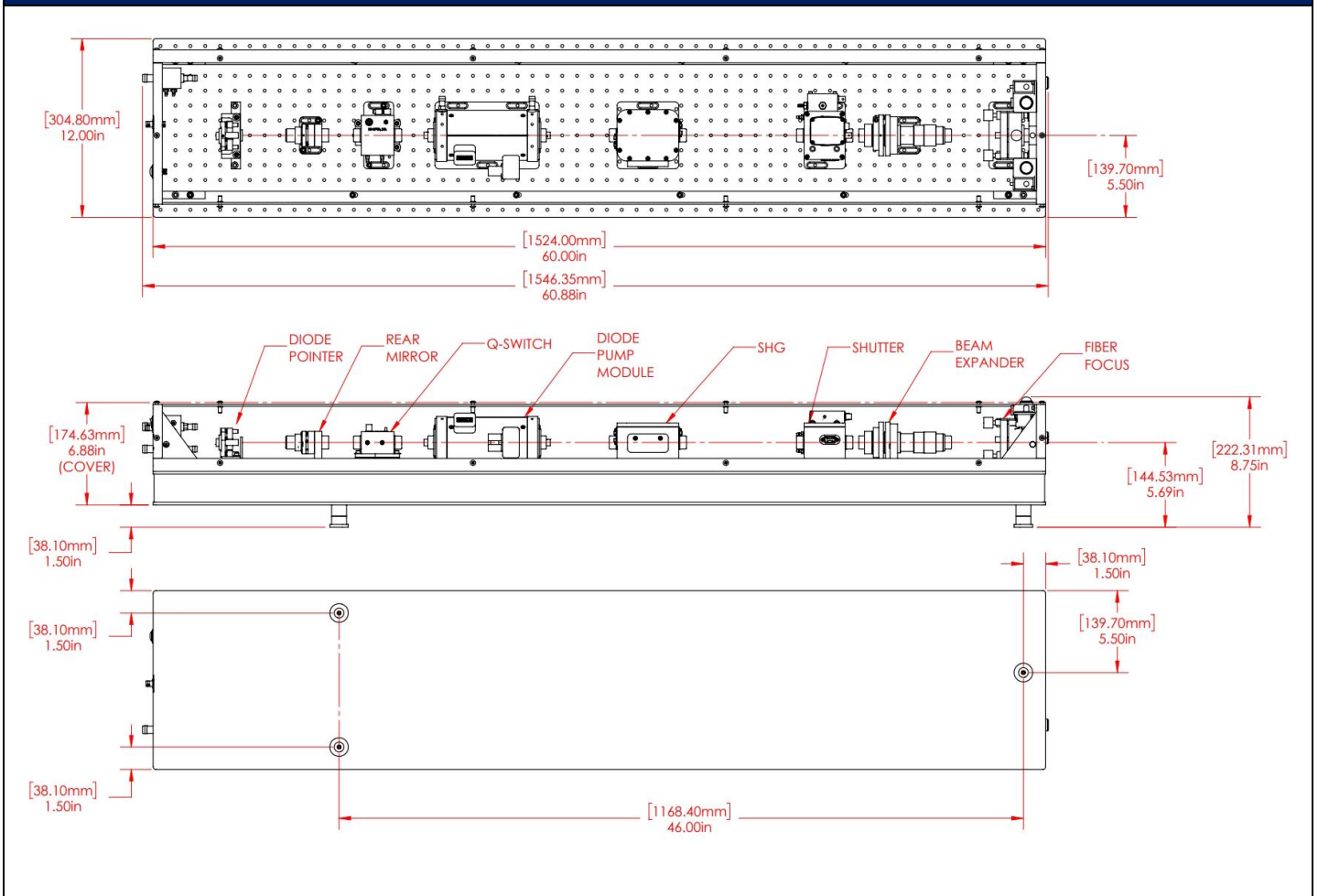
Specifications		
Frequency (kHz):	6	10*
Average Power (W):	350	400*
Pulse Energy (mJ):	58	40*
Pulse Width (ns), nominal:	< 65	< 80*
Peak Pulse Power (kW):	≥ 897.4	≥ 500*
Optical Resonator Length, standard	1524 mm	
Power Station Dimensions	700H x 507W x 460D mm	
Recommended Service	220 +/- 10% VAC, 1-phase, 50/60 Hz, 20A	
Average Consumption	4.6 kW, maximum	
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.

## Resonator Dimensions



## Power Station / Cooler Dimensions

