



## FREQUENCY DOUBLED, DIODE-PUMPED Nd:YAG LASER

### MODEL ILM-15TQG

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 TEM<sub>00</sub> power visible output from small diameter, diffraction limited 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
- 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	532 nm
Transverse Mode	TEM <sub>00</sub>
Beam Diameter, nominal	1.0 mm (before beam expansion)
Beam Divergence (full angle), nominal	≤ 1.5 mRad (before beam expansion)
Polarization	Linear

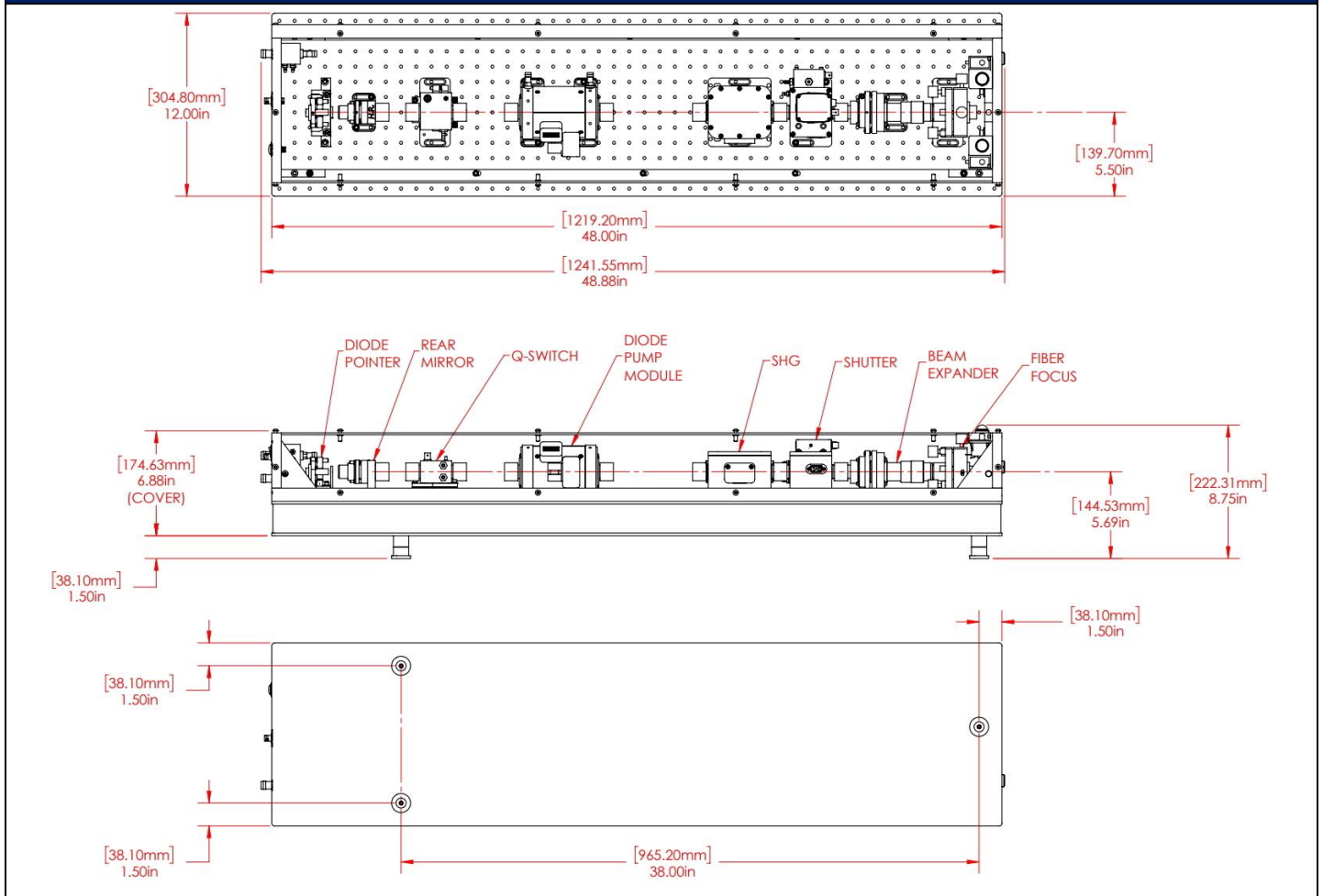
Specifications				
Frequency (kHz):	5	10*	20	30
Average Power (W):	7.0	8.0	7.0	6.5
Pulse Energy (mJ):	1.4	0.8	0.35	0.217
Pulse Width (ns), nominal:	90	120	180	235
Peak Pulse Power (kW):	15.6	6.7	1.9	0.92
Optical Resonator Length, standard	1219 mm			
Power Station Dimensions	700H x 507W x 460D mm			
Recommended Service	220 +/- 10% VAC, 1-phase, 50/60 Hz, 20A			
Average Consumption	2 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

