

## &gt; FEATURES AND BENEFITS

## PULSED Nd: YAG DPSS LASER SYSTEM



- 320 mJ @ 1064 nm,  
< 10 nsec, 110 Hz
- 532 nm / 355 nm available
- Diode pumped
- Low maintenance
- High efficiency
- Long life diode bars
- Output beam characteristics  
maintained over power  
operating range
- eDrive™ control electronics with  
digital remote control

The Gigashot laser system is a new diode-pumped solid-state (DPSS) Nd:YAG laser that delivers 320 mJ per pulse at 1064 nm at a repetition rate of 110 Hz. An unstable laser resonator with two polarization compensated QCW pumped DPSS modules delivers a low divergence output beam with high spatial uniformity. The birefringence compensation between the pump modules eliminates any low order depolarization losses and ensures excellent beam quality even at high frequencies and high average power.

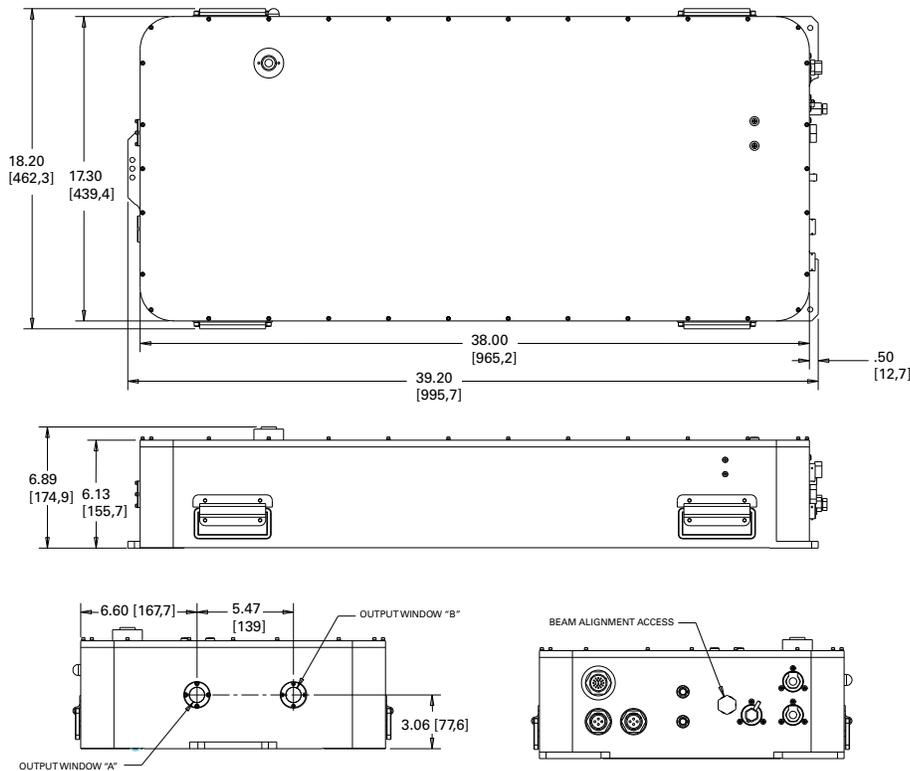
The Gigashot laser features long life laser diode bars and is ideally suited for use in scientific, industrial, and medical applications. The laser is supplied with a 2 year/10,000 operating hour diode warranty.

Customized versions of the Gigashot are also available (including oscillator/amplifier configurations for increased pulse energy). Please contact CEO® for more information.

GIGASHOT SPECIFICATIONS

Specifications				
Parameter	Configurations			Units
Model	GS-320-QMI	GS-150-QMG	GS-100-QMU*	—
Laser Type	DPSS Nd:YAG	DPSS Nd:YAG	DPSS Nd:YAG	—
Wavelength	1064	532	355	nm
Repetition Rate	110	110	110	Hz
Output	> 320	> 150	100	mJ
Spatial Mode**	> 90%	> 90%	> 90 %	—
Beam Diameter @ Output Window	< 6.5	< 6.5	< 6.5	mm
Beam Divergence (Full Angle)	< 0.6	< 0.6	< 0.6	mrad
Pulse Width (FWHM)	< 9	< 9	< 9	nsec
Pulse-to-Pulse Energy Stability	< 1.0%	< 1.5%	< 2%	% rms
Jitter***	< 1.5	< 1.5	< 1.5	ns
Output Stability Over 8 hr	< 2	< 2	< 2	% rms
Polarization	Vertical	Horizontal	Vertical	—
Electrical @ 50/60 Hz (Auto Ranging)	85 - 264	85 - 264	85 - 264	VAC
Operating Temperature (non-condensing)	18 - 30°C	18 - 30°C	18 - 30°C	°C
Dimensions	39.20 x 18.20 x 6.89	39.20 x 18.20 x 6.89	39.20 x 18.20 x 6.89	in

\*Preliminary Specifications - Subject to change. \*\*Gaussian fit at far field. \*\*\*With respect to external trigger.



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This Product is covered by one or more of the following Patents: 5,898,211 5,985,684 5,913,108 6,310,900 Other US and Foreign Patents Pending.

**DANGER**

**VISIBLE LASER RADIATION**

\*AVOID EYE OR SKIN EXPOSURE TO DIRECT OR SCATTERED RADIATION.

Wavelength	Energy	Pulsewidth	PRF
1064 nm	400 mJ	6 ns	110 Hz
532 nm	220 mJ	5 ns	110 Hz
355 nm	100 mJ	4 ns	110 Hz

**CLASS IV LASER PRODUCT**

Rev. A 01/13 ISO 9001:2008 REGISTERED