

Gigashot™ HE

NORTHROP GRUMMAN

> **FEATURES AND BENEFITS**

PULSED Nd: YLF DPSS LASER SYSTEM

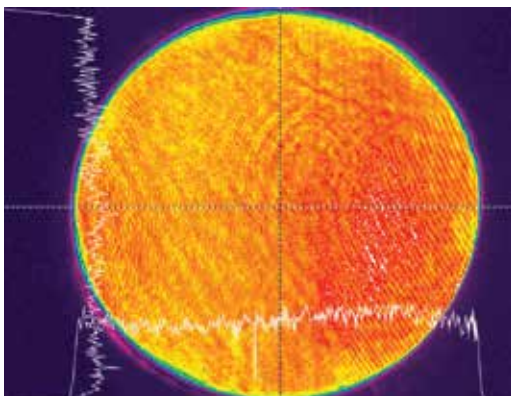


- 10 J @ 1053 nm,
5 J @ 527 nm
< 25 nsec, 20 Hz
- Diode pumped
- Low maintenance
- High efficiency
- Long life diode bars
- Output beam characteristics maintained over operating power range
- eDrive™ control electronics with digital remote control
- Near field flat top beam profile

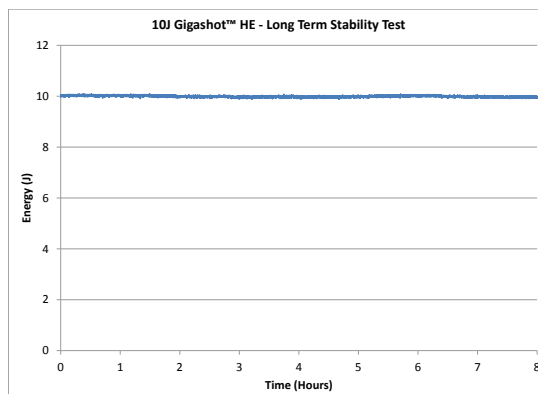
The Gigashot HE laser system is a high energy, short pulse diode-pumped solid-state (DPSS) Nd:YLF laser system. High efficiency, ultra-long life quasi-continuous-wave (QCW) pump diodes allows the laser to operate for billions of shots. The laser uses a Master Oscillator-Power Amplifier (MOPA) configuration to obtain a near field, flat top beam profile. The laser delivers more than 10 J at 1053 nm and 5 J at 527 nm; Injection seeding of the oscillator is optional.

The Gigashot HE 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.



Beam Profile at 10 J output energy at 1053 nm



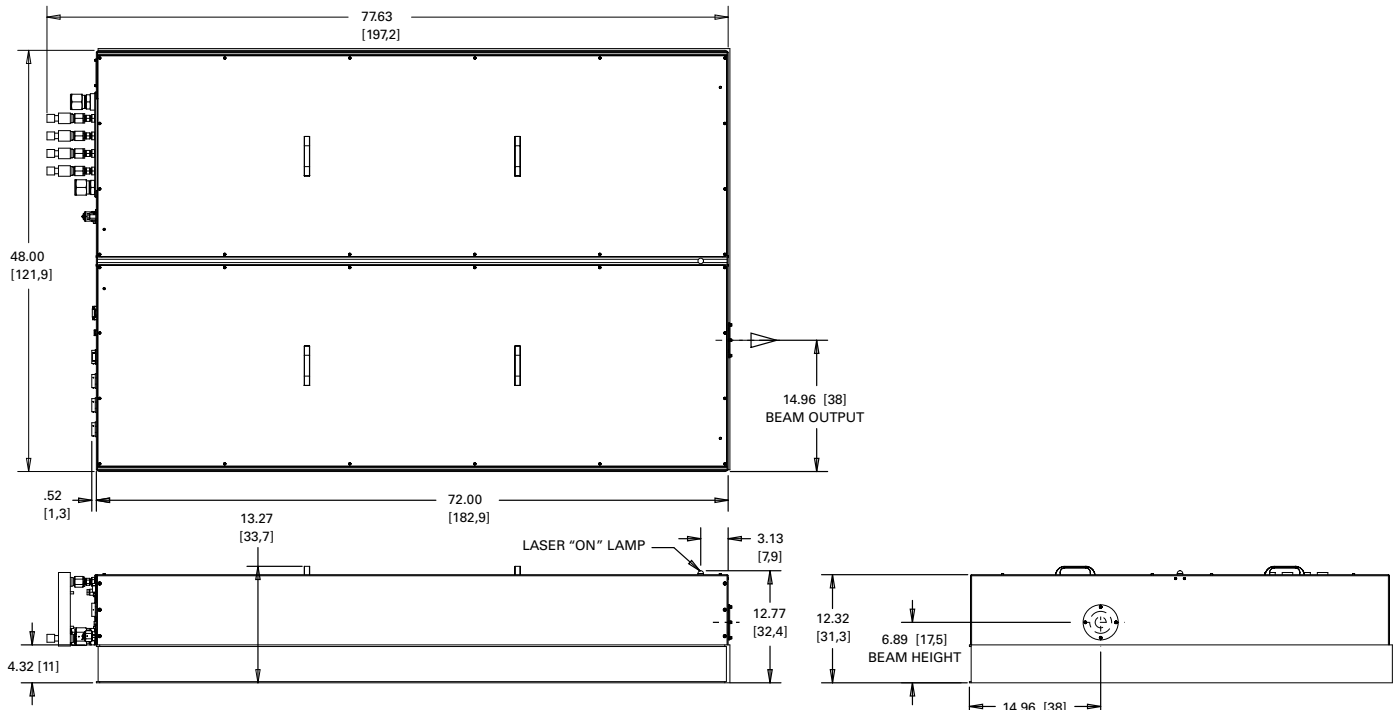
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GIGASHOT HE SPECIFICATIONS

Specifications			
Parameter	Configurations		Units
Model	GS-10000-QMI	GS-5000-QMG	—
Laser Type	DPSS Nd:YLF	DPSS Nd:YLF	—
Wavelength	1053	527	nm
Repetition Rate	20	20	Hz
Pulse Energy	10	5	J
Spatial Mode*	Flat top	Flat top	—
Beam Diameter @ Output Window	22	22	mm
Pulse Width (FWHM)	< 25	< 25	nsec
Pulse-to-Pulse Energy Stability	< 0.5%	< 0.5%	% rms
Jitter**	< 1.0	< 1.0	ns (rms)
Output Stability Over 8 hr	< 1	< 1	% rms
Polarization	Horizontal	Vertical	—
Electrical @ 50/60 Hz (Auto Ranging)	85 - 264	85 - 264	VAC
Operating Temperature (non-condensing)	18 - 30°C	18 - 30°C	°C
Laser Dimensions	77.63 x 48.00 x 13.27	77.63 x 48.00 x 13.27	in

*At image relay plane. **With respect to Q-switch 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	Pulwidth	PRF
1053 nm	10 J	< 25 ns	20 Hz
527 nm	5 J	< 25 ns	20 Hz

CLASS IV LASER PRODUCT

ISO 9001:2008 REGISTERED
Rev. A 04/15