

Gigashot™ FT

FEATURES AND BENEFITS

PULSED Nd: YAG DPSS LASER SYSTEM

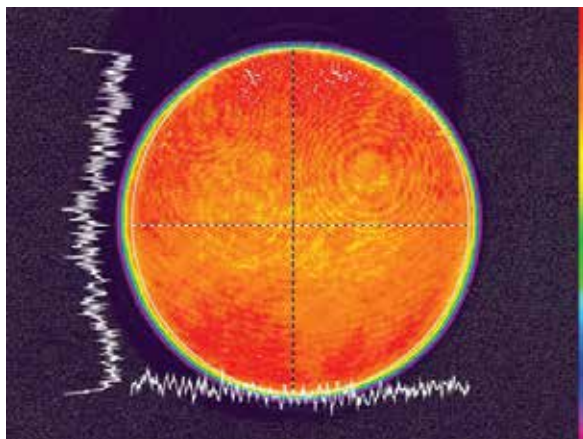


- Smooth flat top profile
- 320 mJ @ 1064 nm, < 10 nsec, 100 Hz
- 532 nm / 355 nm available
- Injection seeding option
- Low maintenance
- High efficiency
- Long life diode bars
- Beam characteristics maintained over a wide adjustable operating energy range
- eDrive™ control electronics with digital remote control

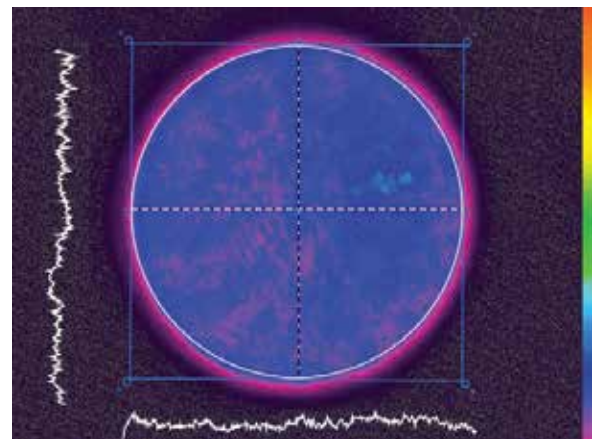
The Gigashot™ FT is a new diode-pumped solid-state (DPSS) Nd:YAG laser that delivers 320 mJ per pulse at 1064 nm at a repetition rate of 100 Hz. The laser has a Master Oscillator-Power Amplifier (MOPA) architecture with an output beam that has a 'flat top' beam profile in the near field – making it ideally suited for pumping ultrafast Ti:Sapphire amplifiers and OPCPAs.

Diode pumping delivers excellent pulse to pulse and long term stability as well as a long operating lifetime. The laser is supplied with a 2 year/10,000 operating hour warranty. Injection seeding is optional.

Customized versions of the Gigashot™ laser system are also available. Please contact CEO® for more information.



Near field beam profile, 532 nm at 100 Hz



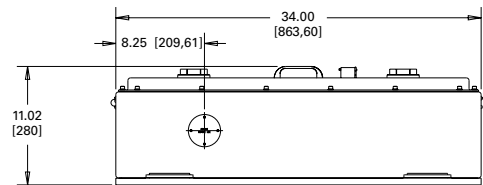
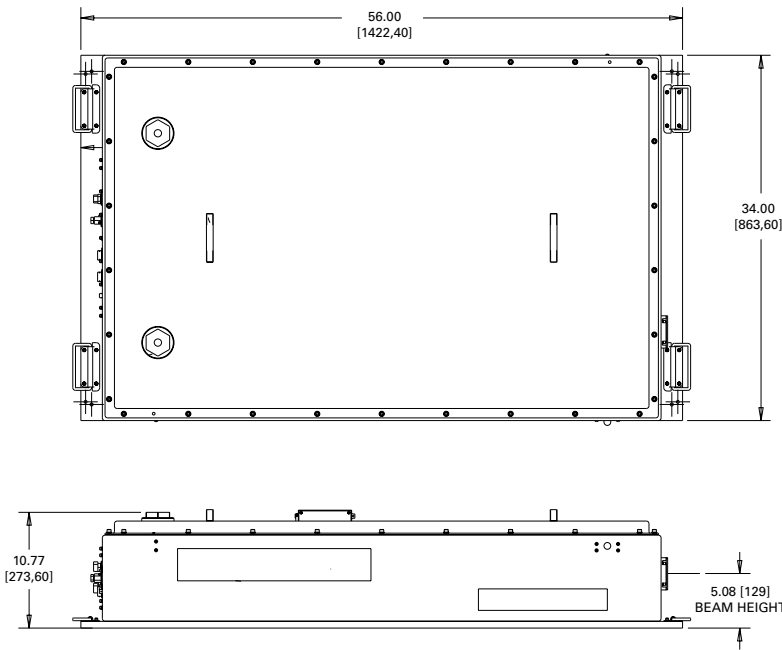
Near field beam profile, 355 nm at 100 Hz

Gigashot™ FT

GIGASHOT SPECIFICATIONS

| Specifications | | | | |
|--|-----------------------|-----------------------|-----------------------|-------|
| Parameter | Configurations | | | Units |
| Model | GS-320-QFI | GS-160-QFG | GS-120-QFU | — |
| Laser Type | DPSS Nd:YAG | DPSS Nd:YAG | DPSS Nd:YAG | — |
| Wavelength | 1064 | 532 | 355 | nm |
| Repetition Rate | 100 | 100 | 100 | Hz |
| Output | > 320 | > 160 | > 120 | mJ |
| Spatial Mode* | < 15 | < 15 | < 15 | % rms |
| 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) | < 10 | < 10 | < 10 | nsec |
| Pulse-to-Pulse Energy Stability | < 1.0 | < 1.5 | < 2 | % rms |
| Jitter** | < 1.0 | < 1.0 | < 1.0 | 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 | 56.00 x 34.00 x 10.77 | 56.00 x 34.00 x 10.77 | 56.00 x 34.00 x 10.77 | in |

*Measured within an aperture area containing over 90% of pulse energy. **With respect to external trigger.



Dimensions in Inches [cm]

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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

— LASER RADIATION —

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

| Wavelength | Energy | Pulsewidth | PRF |
|------------|--------|------------|--------|
| 1064 nm | 400 mJ | < 10 ns | 100 Hz |
| 532 nm | 220 mJ | < 10 ns | 100 Hz |
| 355 nm | 180 mJ | < 10 ns | 100 Hz |

CLASS IV LASER PRODUCT

Rev. A 08/15 ISO 9001:2008 REGISTERED