

## Powerlite Furie™ LD



### Powerlite Furie LD, 5 J at 532 nm in a low divergent beam

Built on the proven Powerlite laser platform and using our energy through efficiency approach, the Furie LD is a gaussian coupled system that delivers 5 J of green, and 7 J of IR ensuring excellent beam profile and overall performance that's best-in-class in all aspects of stability. This compact and robust laser is designed to operate 24/7 for set-and-forget industrial applications while providing flexibility and versatility required by scientific users, making it ideal for materials processing applications, harmonic generation, ranging and LIDAR.

High Energy Nd:YAG  
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*5 J Green, 7 J IR*

*10 Hz repetition rate*

*Superior beam quality*

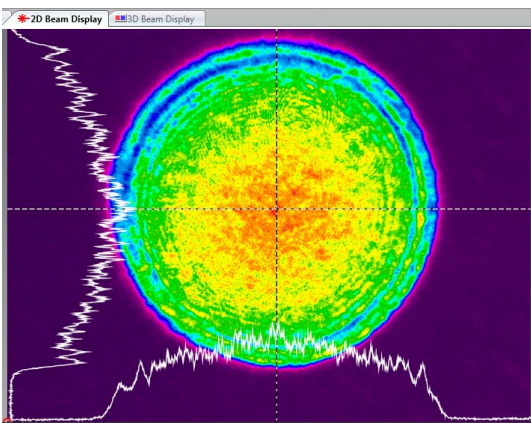
*Low divergence*

*Proven Powerlite platform*

*Convenient Intuitive Graphical User Interface*

*Distributed intelligence power supply*

*Ideal for materials processing,  
Harmonic Generation, Ranging and  
LIDAR*



5J Green

# Powerlite Furie LD Specifications

Description PL Furie LD	1064nm	532nm
Repetition Rate (Hz)	10	10
Energy (J)	7J	5J
Pulsewidth (nsec)	<15	<15
Divergence (mrad)	<0.5	<0.5
Beam Pointing Stability <sup>1</sup> ( $\pm\mu\text{rad}$ )	<40	<40
Beam Diameter ( $\pm 1$ mm)	20	20
Beam Spatial Profile (Gaussian fit)	>0.8	>0.8
Warm up time <sup>2</sup> (min)	<30	<30
Jitter <sup>3</sup> ( $\pm\text{ns}$ )	1.0	1.0
Energy Stability ( $\pm\%$ RMS)	1.0	1.5
Energy Drift <sup>4</sup> ( $\pm\%$ )	<1.0	<1.5
Polarization	horizontal	vertical

Modular, single rack power supply



Notes

1. 99.9% shots will be  $\leq \pm 30 \mu\text{rad}$ s with  $\Delta T$  room  $\leq \pm 3^\circ\text{C}$
2. Time to reach full energy
3. With respect to external trigger, unseeded
4. Average for 8 hours with  $\Delta T \pm 3^\circ\text{C}$

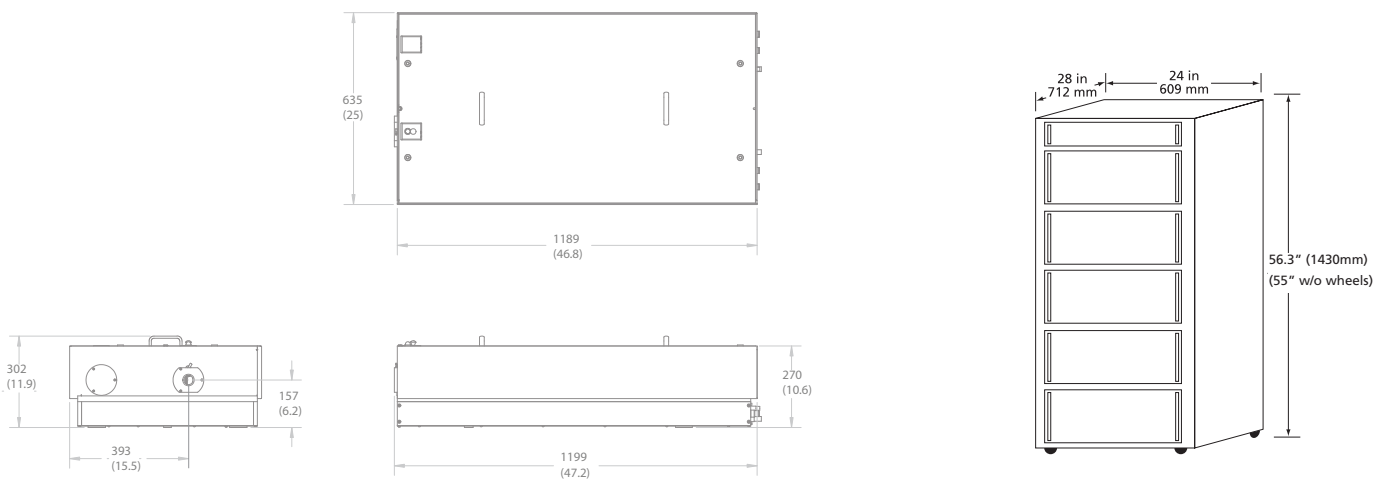
As a part of our continuous improvement program, all specifications are subject to change without notice.

# Powerlite Furie LD System Requirements

Size	Optical Head (LxWxH)	1199 x 635 x 302 mm (47.2 x 25 x 11.9")
	Power Supply (LxWxH)	609 x 712 x 1430 mm (24x28x56.3") H=55" w/o wheels
Weight	Optical Head	245 kg (540 lbs)
	Power Supply	281 kg (620 lbs)
Water	Service	two cooling groups, each requiring 1-3 GPM (gallons/minute) at 10-40 PSI pressure drop
	Temperature	<22° C / 70° F (higher flow rate for higher temperature)
Electrical Service		200-240 V~, 50/60 Hz, single Ø, 40 A max.
Room Temperature		18-30° C / 65-87° F (operation range)
Umbilical Length		4.5 m (15 ft)

# Physical Layout

Dimensions in mm (inch)



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