

Genus™



High Energy Nd:YAG
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8J IR, 4J Green

10 Hz repetition rate

Superior beam quality

Intuitive Graphical User Interface

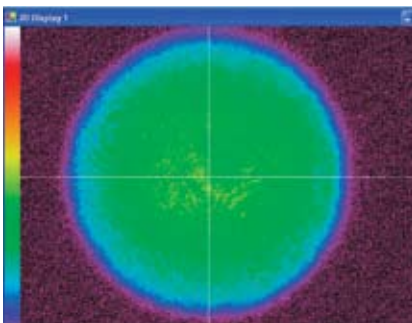
Distributed intelligence power supplies

Genus - Energy Reclassified

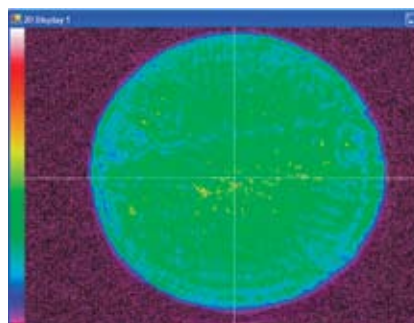
High energy has been redefined for Nd:YAG lasers. The Genus provides 8J of IR and 4J of green at 10Hz - the perfect alternative to multiplexing lasers of lower energy. Designed to be the ultimate Ti:Sapphire pump and materials processing laser, the Genus provides raw power in a refined package for the lab and industry.

Built on the architecture found in Continuum's Agile laser, the Genus incorporates an intuitive Graphical User Interface, active diagnostics, and distributed intelligence control. Simply put, the Genus is the highest energy, most advanced laser platform on the market today.

Ideal for Ti:Sapphire pumping or materials processing



8J IR



4J Green

Genus Specifications



Repetition Rate (Hz)	10
Energy (mJ)	
1064 nm	8J
532 nm	4J
Pulsewidth (nsec)	
532 nm	8-10ns
Divergence ¹ (mrad)	0.45
Beam Pointing Stability ² ($\pm\mu\text{rad}$)	30
Warm up time ³ (<min)	5
Jitter ⁴ ($\pm\text{ns}$)	0.5
Energy Stability ⁵ ($\pm\%$)	
532 nm	3.0; 1.0
Power Drift ⁶ ($\pm\%$)	
532 nm	6.0
Beam Spatial Profile	super-Gaussian (Std) ⁷
Max Deviation from fitted Gaussian ⁸ ($\pm\%$)	
Near Field (<1m)	40

Notes

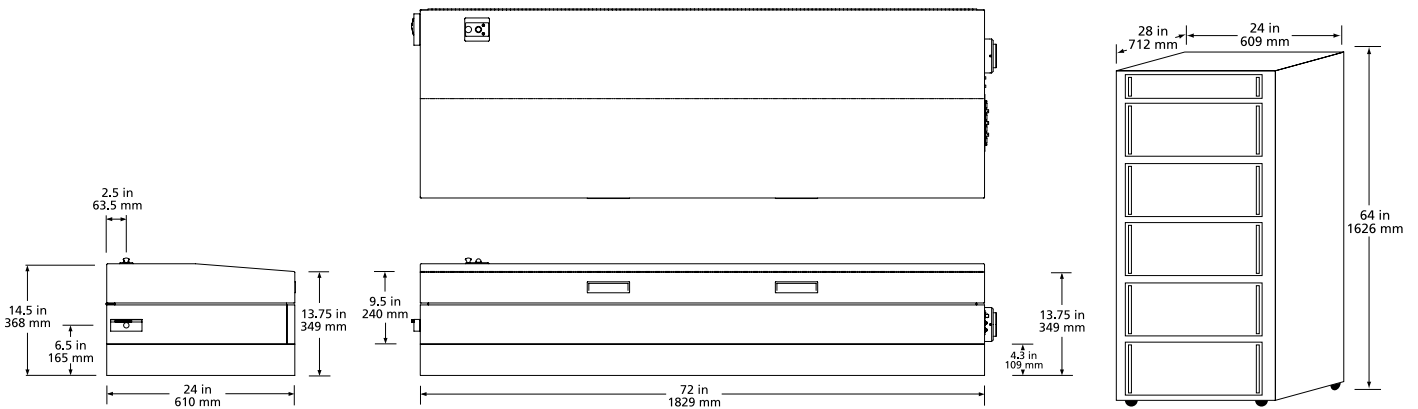
1. Full angle for 86% (1/e²)
2. 99.9% shots will be $<\pm 30 \mu\text{rad}$ s with ΔT room $<\pm 3^\circ\text{C}$
3. Time to reach full energy
4. With respect to external trigger
5. The first value represents shot-to-shot for 99.9% of pulses, the second value represents RMS
6. Average for 8 hours with $\Delta T \pm 3^\circ\text{C}$
7. Consult factory for other beam configurations
8. Within FWHM points near field at 1 meter

All specifications at 1064 nm unless otherwise noted.

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

Genus System Requirements

Size	Optical Head (L x W x H)	24" x 72" x 13"
	Power Supply (L x W x H)	24" x 28" x 64"
Water	Service	1-3 GPM (gallons/minute) at 10 - 40 PSI pressure drop x2
	Temperature	<22° C / 70° F (higher flow rate for higher temperature)
Electrical Service		220 or 240 VAC, single Φ , 50 A
Room Temperature		18 to 30° C / 65 to 87° F
Umbilical Length		3.81 m (12.5 ft)



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