

ETNA HP Diode-Pumped Compact Laser Series



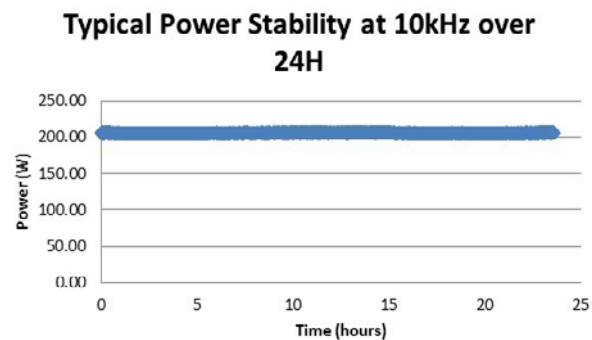
ETNA HP

Diode-Pumped Compact Laser Series

Applications

- Femtosecond amplifier pumping
- ITO ablation
- Si annealing
- Laser OLED Lift-Off
- CFRP Machining
- Micromachining
- Instrumentation

Long term stability of ETNA High M² over 30 hours



Options

Fibered module for industrial applications including:

- Calibrated power measurement
- Computer controlled power attenuation (5-99%)
- Fiber optic injection (compatible with industrial fiber optics)
- Security shutter / Water cooled beam dump

Physical Characteristics (L x W x H)

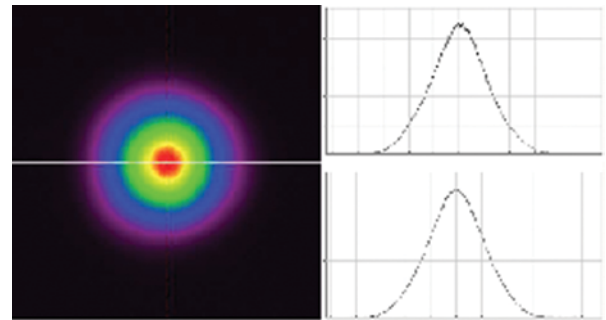
Power supply	83 x 60 x 80 cm
32.68 x 23.62 x 31.50 in	
Cooling unit	83 x 44 x 60 cm
32.68 x 17.32 x 23.62 in	
Laser Head	108 x 28.5 x 21.3 cm
42,52 x 11.22 x 8.39 in	

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Typical ETNA HP beam profile at 532 nm



Features and Benefits

- High Green power with reliability
- Outstanding stability
- Compatible with industrial environment
- Fiber output available

Specifications

Version	ETNA IR	ETNA Low M ²	ETNA High M ²
Wavelength (nm)	1064	532	532
Repetition rate (kHz) ⁽¹⁾	4 to 40	8 to 40	4 to 20
Energy per pulse (mJ)	> 22	> 15	> 17
Average power (W) ⁽²⁾	> 220	> 150	> 170
Typical pulse width (ns)	85	50	60
Pulse to pulse energy stability (% rms)	< 1.0		
Typical M ²	20 ± 2.5	15 ± 2.5	25 ± 2.5
Beam pointing stability (μrad)	+/- 30		
Typical beam size (mm) at waist position	3.2	2.1	2.7
Beam profile	Multi-mode Gaussian	Multi-mode Gaussian	Multi-mode Gaussian
Polarization	Unpolarized	Vertical	Vertical

⁽¹⁾ Factory preset at one repetition rate ⁽²⁾ Other average powers available on request

Utilities and Environment Requirements

Voltage	230 VAC ± 5% Single phase
Frequency	50 – 60 Hz
Water Flow	> 2.7 gal/mn > 10 L/min
Static Pressure	43.5 – 72 psi 3 – 5 bars
Temperature	15 – 17°C