

# High-Energy HE1060 & HE532

Microjoule energy picosecond and femtosecond fiber lasers

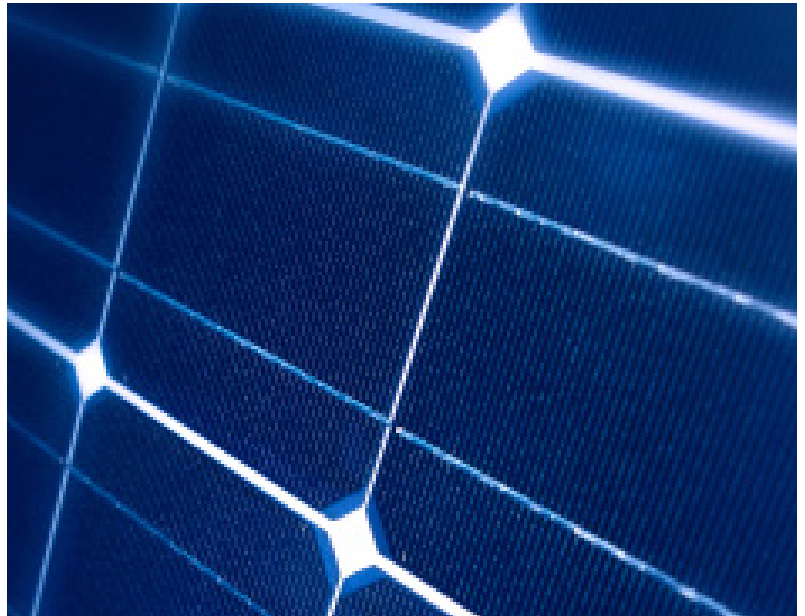


## Key Features

- Pulsewidths from 500fs to 100ps
- Up to 10 $\mu$ J pulse energy
- Single-shot to 1MHz variable repetition rate
- 1064nm or 532nm wavelengths
- Compact and air cooled

## Applications

- Ultrafast material processing
- Micromachining
- Thin film scribing, surface and internal marking
- Semiconductor processing
- Micro and nano structuring
- Tissue ablation
- Ophthalmic surgery



## Versatile High Energy fiber lasers for material processing

The HE-series is a range of high energy picosecond and femtosecond fiber lasers.

Exceptional single-mode beam quality, Megawatt peak powers and class-leading stability enable the most demanding processes to be explored with these systems.

The **HE 532** series adds fully integrated second harmonic generation to efficiently produce green output with Microjoule pulse energies.

### Flexible

The integrated output modulator allows single-shot, burst-mode or continuous operation as well as pulse-to-pulse control of intensity,

### Ease of Use

The systems are based on an inherently robust self-starting ultrafast fiber laser oscillator and high energy fiber amplifier. They are air-cooled and require no user alignment or maintenance.

## STANDARD SPECIFICATIONS

	1064nm High-energy Ultrafast Laser		532nm High-energy Ultrafast Laser	
Model	HE-1060-10uJ-SP	HE-1060-2uJ-fs	HE-532-5uJ-SP	HE-532-1uJ-fs
Central Wavelength	1064nm	1064nm	532nm	532nm
Maximum Pulse Energy	>10μJ*	>2μJ	>5μJ	>1μJ
Pulse Width	<5ps	<500fs	<5ps	<500fs
Variable Repetition Rate (user-selectable)	Single-shot to 500kHz	Single-shot to 1MHz	Single-shot to 500kHz	Single-shot to 1MHz
Maximum Average Power	5W	2W	2.5W	1W
Power Stability	<2%		<2%	
M-squared	<1.3		<1.3	
Output Optic	Collimated		Collimated	
Output Polarization	Linear		Linear	
Cooling	Air-cooled		Air-cooled	
Power Consumption (max)	<250W		<250W	
Dimensions (WxLxH, mm)				
Laser Chassis	450 x 390 x 180 (19" rack-mount)		450 x 390 x 180 (19" rack-mount)	
Remote Optical Head	220 x 360 x 130		220 x 360 x 130	
Weight	<25kg		<25kg	

\*15μJ/100ps option available

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