



HQF Series Lamp-pumped Picosecond Laser

Key Features

- ◆ Single pulse energy up to 500mJ
- ◆ Peak power up to 1.5GW
- ◆ Repetition rate up to 10Hz
- ◆ Excellent beam homogeneity
- ◆ Great stability
- ◆ Compact design, sealed package, high reliability

Applications

Biomedical applications
 Laser ranging
 Differential absorption lidar
 Particle image velocimetry (PIV)
 Laser shock processing (LSP)
 Laser-induced breakdown spectroscopy (LIBS)
 Laser-based ultrasound detection
 Laser-induced fluorescence (LIF)
 Tissue ablation
 Non-linear optics

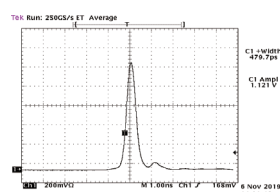
Technical Specifications

Wavelength (nm)	1064 / 532	
Repetition rate (Hz)	1~10	
Pulse energy (mJ)	500mJ@1064nm, 250mJ@532nm	400mJ@1064nm, 200mJ@532nm
Energy stability RMS	<2%@1064nm, <3%@532nm	<3%@1064nm, <4%@532nm
Other parameters		
Pulse width FWHM (ps)	350	400
Beam full divergence (typ., mrad)	Horizontal @1/e ²	<3
	Vertical @1/e ²	<3
Beam diameter (mm)	~11	
Spatial profile	Top hat	
Polarization direction	Vertical	
Electrical supply	220V/110V±10%AC, 50/60Hz	
Power consumption	<500W	
Environment requirements	temperature 10~30°C, humidity <75%	

1. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.



Beam profile of the amplified pulse

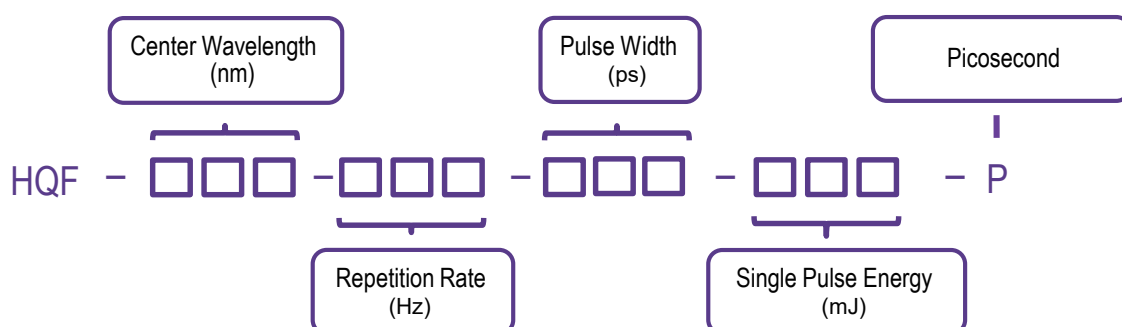


Typical pulsewidth

Order Information

Wavelength (nm)	Part Number	Repetition Rate (Hz)	Pulse Width (ps)	Single Pulse Energy (mJ)
1064/532	HQF-1064/532-10-350-500/250-P	1~10	350	500@1064 250@532
	HQF-1064/532-10-400-400/200-P	1~10	400	400@1064 200@532

Part Numbering Schema



Mechanical Drawings (in mm)

