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

Aesthetic medicine

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

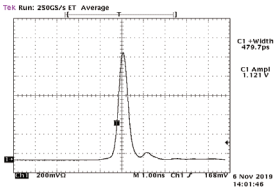
Non-linear optics

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/e²	<3	
	Vertical @1/e²	<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℃， humidity <75%	

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

Beam profile of the amplified pulse



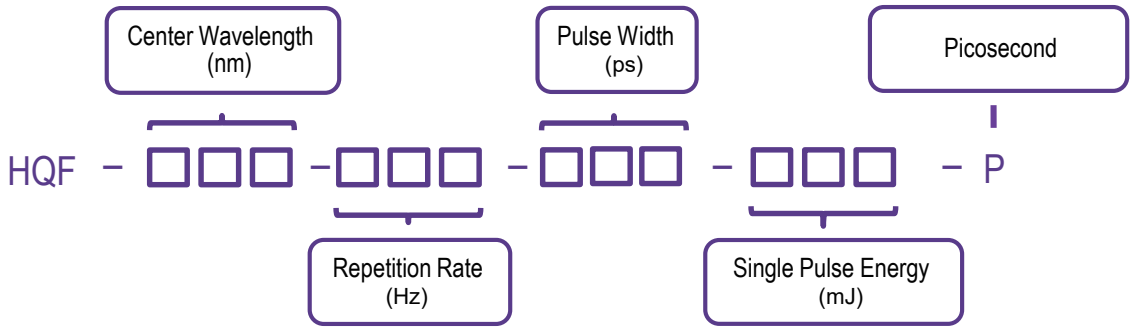
Typical pulsewidth

RealLight

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)