



HQF Series Lamp-pumped Picosecond MOPA Laser

Key Features

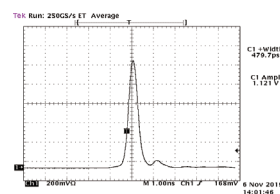
- ◆ Single pulse energy up to 500mJ
- ◆ Peak power up to 1.5GW
- ◆ Repetition rate up to 10Hz
- ◆ Excellent beam homogeneity
- ◆ Great stability
- ◆ Compact design, sealed package, high reliability

Applications

Laser ranging Aesthetic medicine
 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



Beam profile of the amplified pulse



Typical pulsewidth

Technical Specifications

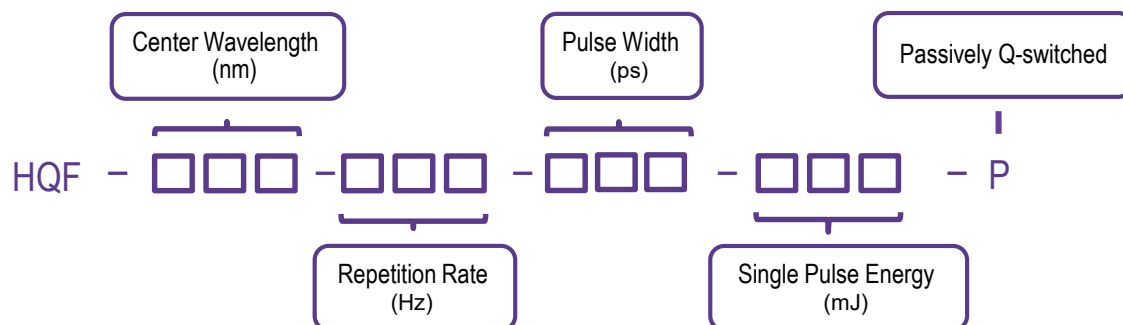
Part Number		HQF-1064/532-10-350-500/300-P	HQF-1064/532-10-350-350/200-P
Repetition rate（Hz）		1~10	1~10
Pulse energy（mJ）			
1064nm		500	350
532nm		300	200
Energy stability RMS			
1064nm		<2%	<3%
532nm		<3%	<4%
Power drift ¹			
1064nm		<2%	
532nm		<3%	
Other parameters			
Pulse width FWHM（ps）		350	
Beam 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		220VAC±5% 50~60Hz	
Power consumption		<1kW(500mJ@10Hz)	
Environment requirements		temperature 18~35℃，humidity <75%	

1. Average energy variation is measured at room temperature with fluctuations less than 3°C within 8 hours.
2. As products are constantly being updated, the right of final interpretation of technical specifications or illustrations in datasheet belongs to RealLight.
3. 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.

Order Information

Wavelength (nm)	Part Number	Repetition Rate (Hz)	Pulse Width (ps)	Single Pulse Energy (mJ)
1064/532	HQF-1064/532-10-350-500/300-P	1~10	350	500@1064 300@532
	HQF-1064/532-10-350-350/200-P	1~10	350	350@1064 200@532

Part Numbering Schema



Mechanical Drawings (in mm)

