



HQF Series Lamp-pumped Picosecond MOPA Laser

Key Features

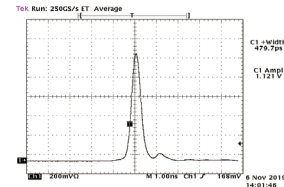
- ◆ Single pulse energy up to 500mJ
- ◆ Peak power up to 1.5GW
- ◆ Repetition rate up to 10Hz
- ◆ Excellent beam homogeneity
- ◆ Great stability
- ◆ Compact design, sealed package, high reliability

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

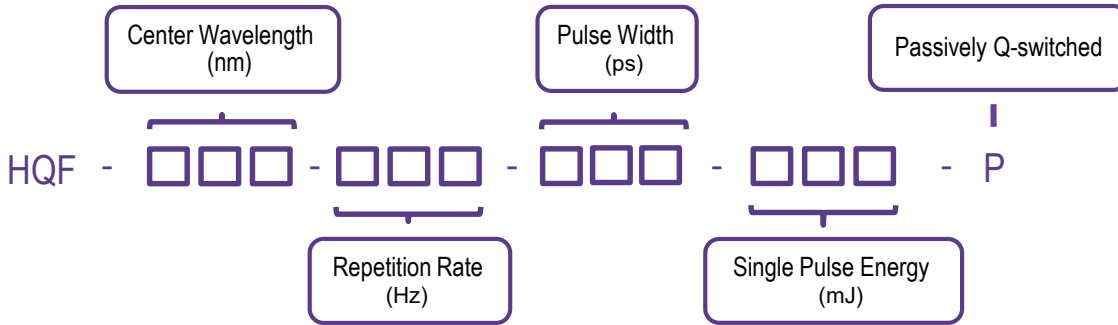
Part Number	HQF-1064/532-10-350-500/300-P	HQF-1064/532-10-500-350/200-P
Repetition rate (Hz)	1~10	1~10
Pulse energy (mJ)		
1064nm	500	350
532nm	300	200
Energy stability RMS		
1064nm	<2%	<3%
532nm	<3%	<4%
Power drift¹		
1064nm	<2%	
532nm	<3%	
Other parameters		
Pulse width FWHM (ps)	350	500
Beam full 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 5~35°C, humidity <80%	

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-1064/532-10-500-350/200-P	1~10	500	350@1064 200@532

Part Numbering Schema



Mechanical Drawings (in mm)

