

HQF Series Sub-nanosecond Lamp Pumped Solid State Laser

Key Features

- Single pulse energy up to 500mJ
- Peak power up to 1.5GW
- Repetition rate up to 10Hz
- Excellent beam homogeneity

Technical Specifications

- 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

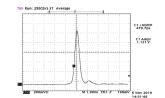
Laser-induced fluorescence (LIF)

Tissue ablation

Non-linear optics



Beam profile of the amplified pulse



Typical pulsewidth

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 drift ¹							
1064nm		<2%					
532nm		<3%					
Other parameters							
Pulse width FWHM (ps)		350	500				
Beam full divergence (typ., mrad)	Horizontal @1/e ²	<3					
	Vertical @1/e²	<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.

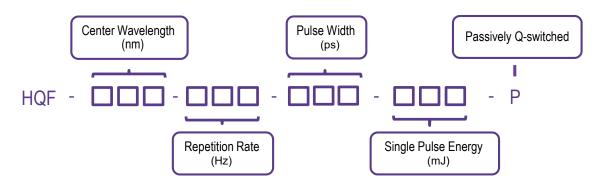
^{2.} As products are constantly being updated, the right of final interpretation of technical specifications or illustrations in datasheet belongs to RealLight.



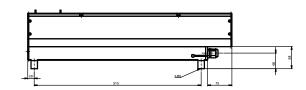
Order Information

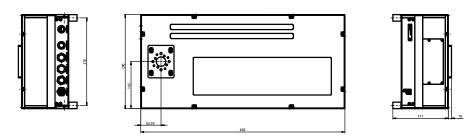
Wavelength (nm)	Part Number	Repetition Rate (Hz)	Pulse Width (ps)	Single Pulse Energy (mJ)
1064/532	HQF-1064/532-10-350-500/300-P	1~10	350	500@1064 300@532
	HQF-1064/532-10-500-350/200-P	1~10	500	350@1064 200@532

Part Numbering Schema



Mechanical Drawings (in mm)





HQF-1064/532-10-350-500/300-P

