

HQF Series Sub-nanosecond Lamp Pumped Solid State Laser

Key Features

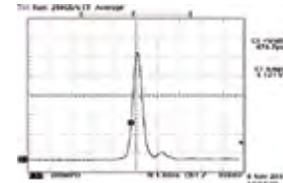
- ◆ Single pulse energy up to 500mJ
- ◆ Peak power up to 1.5GW
- ◆ Repetition rate up to 10Hz
- ◆ Excellent beam homogeneity
- ◆ Great stability
- ◆ Compact design, sealed package, high reliability

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



Beam profile of the amplified pulse



Typical pulsewidth

Technical Specifications

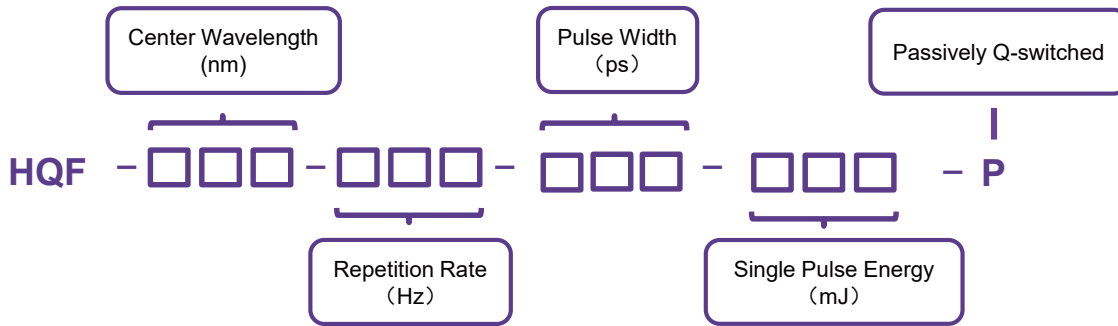
Part Number	HQF-1064/532-10-500-500/300-P	HQF-1064/532-5-400-400/200-P
Repetition rate (Hz)	1~10	1~10
Pulse energy (mJ)		
1064nm	500	400mJ@5Hz, 250mJ@10Hz
532nm	300	200mJ@5Hz, 100mJ@10Hz
Energy stability RMS		
1064nm	<2%	
532nm	<3%	
Power drift1		
1064nm	<2%	
532nm	<3%	
Other parameters		
Pulse width FWHM (ps)	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. Lasers with wavelength at 355nm or 266nm can be customized upon request.

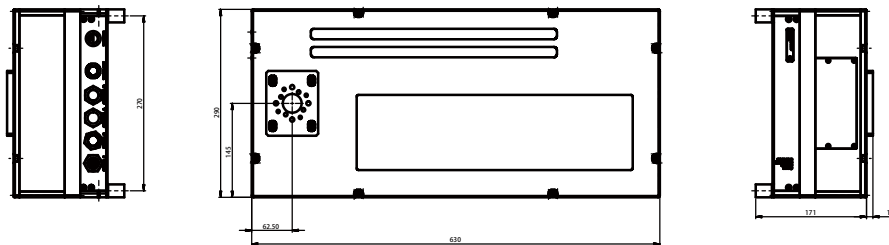
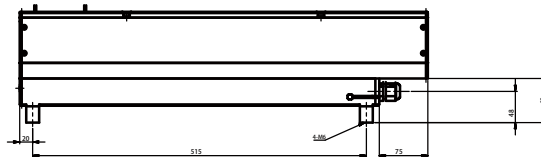
Order Information

Wavelength (nm)	Part Number	Repetition Rate (Hz)	Single Pulse Energy (mJ)	Pulse Width (ps)
1064/532	HQF-1064/532-10-500-500/300-P	1~10	500@1064 300@532	500
	HQF-1064/532-5-500-350/200-P	1~10	250@1064 100@532	400
		1~5	400@1064 200@532	400

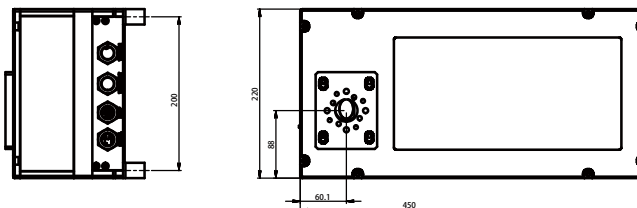
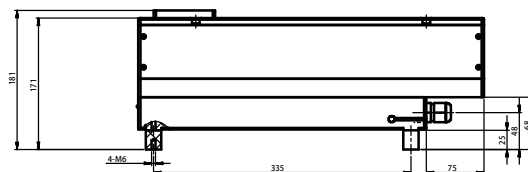
Part Numbering Schema



Mechanical Drawings (in mm)



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



HQF-1064/532-5-500-400/200-P

