

HQF Series Nanosecond Lamp Pumped Q-switched Laser



Applications

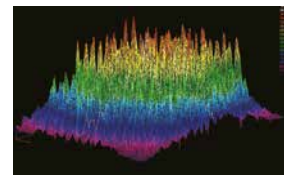
Aesthetic medicine	Laser ranging
Differential absorption lidar	Particle image velocimetry(PIV)
Micromachining	Laser shock processing(LSP)
Laser-induced breakdown spectroscopy(LIBS)	
Laser-based ultrasound detection	Laser-induced fluorescence (LIF)
Tissue ablation	Raman spectroscopy
Non-linear optics	

Key Features

- ◆ Various options of energy
- ◆ Compact design
- ◆ Excellent beam quality
- ◆ Cost effective



Beam Profile



Beam intensity distribution

Technical Specifications

Part Number	HQF-1064/532-10-6-800/400-N	HQF-1064/532-10-6-1200/600-N
Repetition rate (Hz)	1~10	
Pulse energy (mJ)		
1064nm	800	1200
532nm	400	600
Energy stability RMS		
1064nm	<2%	
532nm	<3%	
Power drift¹		
1064nm	3%	
532nm	5%	
Other parameters		
Pulse width FWHM (ns)	6~8	
Beam full divergence (typ., mrad)	Horizontal @1/e ²	<5
	Vertical @1/e ²	<5
Pointing stability ² (μrad)	<20	
Time jitter ³ (RMS,ns)	<0.5	
Beam diameter (mm)	~9	~9
Spatial profile	Top hat	
Polarization state	linear polarization	
Lamp lifetime (shot)	>6X10 ⁷	
Electrical Supply	220VAC±5% 50-60Hz	
Power consumption	<1.8kW(800mJ@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. Deviation from beam mean centroid.

3. With respect to external trigger.

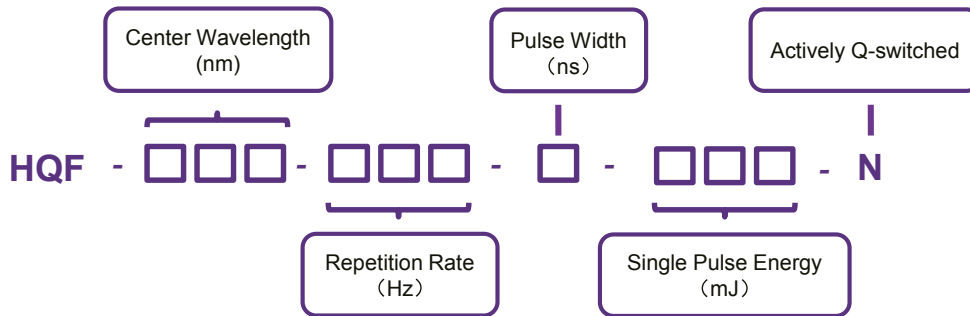
Others: Lasers with wavelength at 355nm or 266nm can be customized upon request.

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

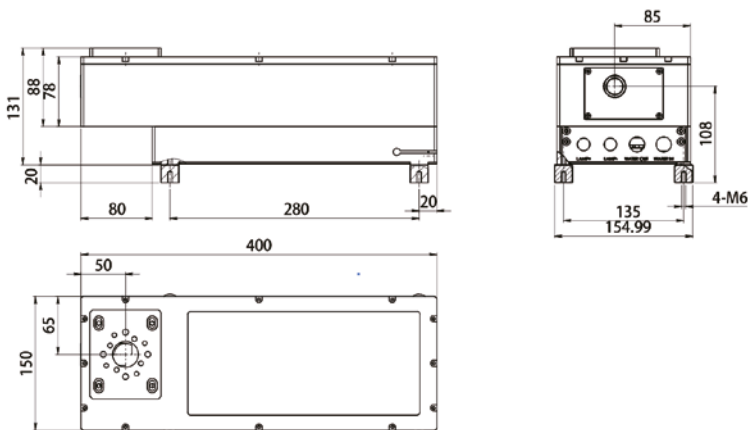
Order Information

Wavelength (nm)	Part Number	Repetition Rate (Hz)	Single Pulse Energy (mJ)	Pulse Width (ns)
1064/532	HQF-1064/532-10-6-800/400-N	1~10	800@1064nm 400@532nm	6.5
	HQF-1064/532-10-6-1200/600-N	1~10	1200@1064nm 600@532nm	6.5

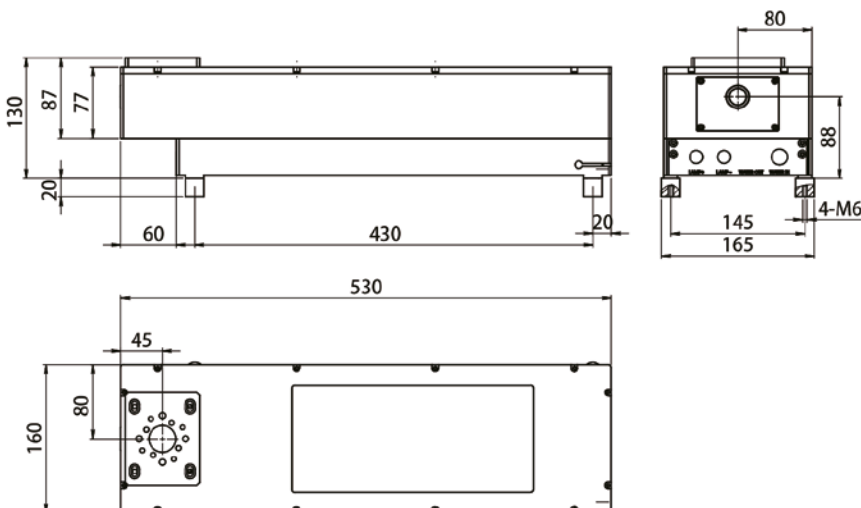
Part Numbering Schema



Mechanical Drawings (in mm)



Single-lamp nanosecond lamp pumped Q-switched laser HQF-1064/532-10-6-800/400-N



Double-lamp nanosecond lamp pumped Q-switched laser HQF-1064/532-10-6-1200/600-N

