

HQF Series Lamp-pumped Q-switched Nanosecond Laser



Applications

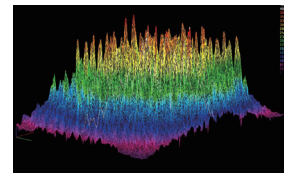
Aesthetic medicine	Laser ranging
Differential absorption lidar	Particle image velocimetry(PIV)
Micromachining	Laser shock processing(LSP)
Laser-induced breakdown spectroscopy(LIBS)	
Laser-based ultrasound detection	Laser-induced fluorescence (LIF)
Tissue ablation	Raman spectroscopy
Non-linear optics	

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)	5~8	
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	
Spatial profile	Top hat	
Polarization state	linear polarization	
Lamp lifetime (shot)	>6X10 ⁷	
Electrical Supply	220VAC±5% 50~60Hz	
Power consumption	<1.0kW(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.

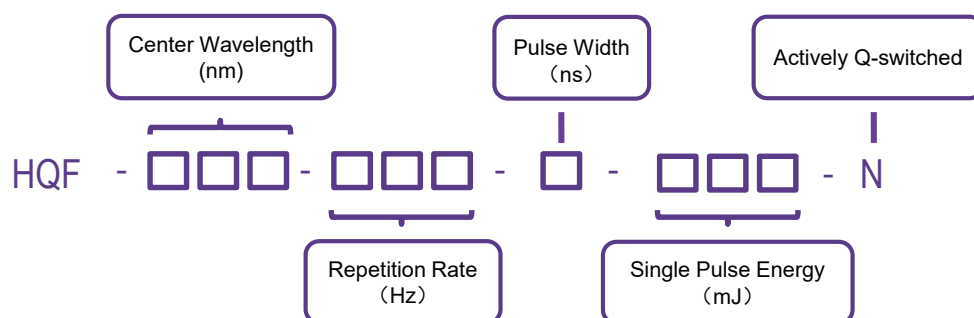
3. With respect to external trigger.

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

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	5~8
	HQF-1064/532-10-6-1200/600-N	1~10	1200@1064nm 600@532nm	5~8

Part Numbering Schema



Mechanical Drawings (in mm)

