HQF Series Nanosecond Lamp Pumped Q-switched Laser

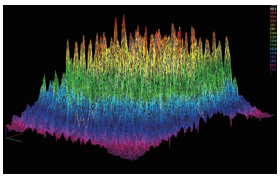
Applications

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 drift[1]			
1064nm		3%	
532nm		5%	
Other parameters			
Pulse width FWHM（ns）		6~8	
Beam full divergence (typ., mrad)	Horizontal @1/e²	<5	
	Vertical @1/e²	<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℃，humidity <80%	

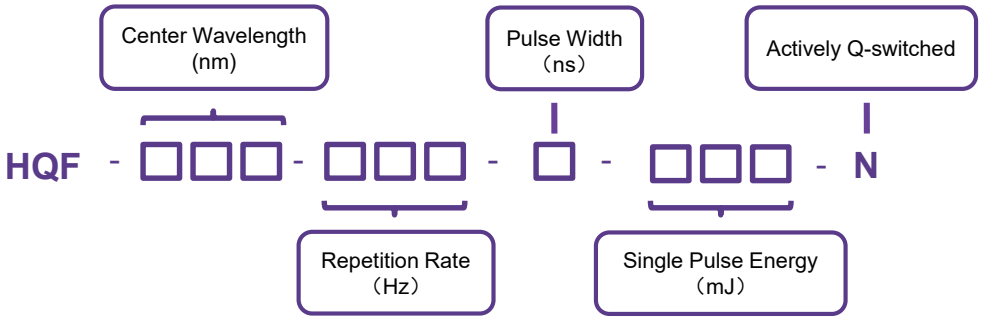
1.Average energy variation is measured at room temperature with fluctuations less than 3℃ within 8 hours.
2.Deviation from beam mean centroid.
3.With respect to external trigger.
Others: Lasers with wavelength at 355nm or 266nm can be customized upon request.

RealLight

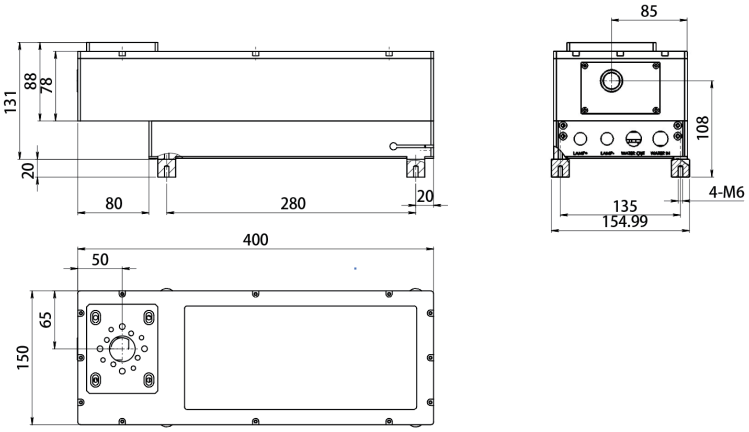
Order Information

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

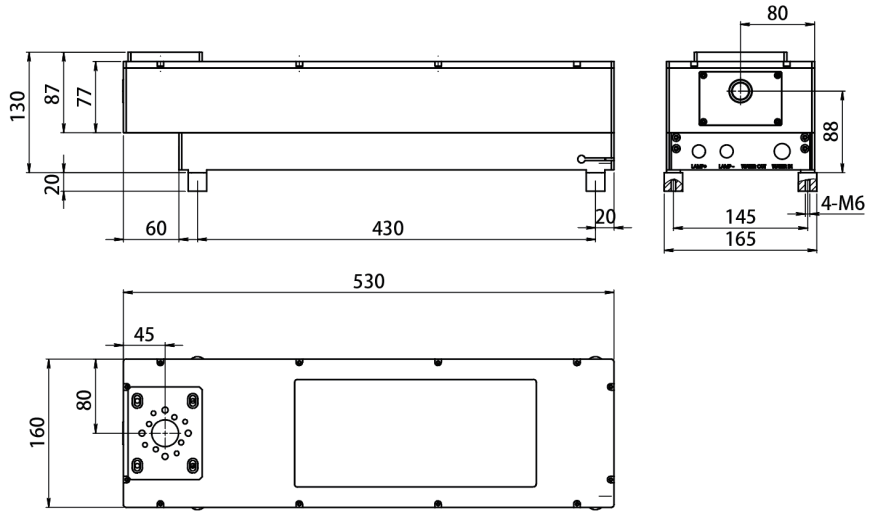
Part Numbering Schema



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