HQF Series Lamp-Pumped Long Pulse 2940nm Er:YAG Laser



HQF series lamp pumped long pulse 2940nm Er:YAG laser consists of a laser module unit, energy detection module. This laser emits near-to-mid-infrared light (2940nm Erbium laser), which coincides with the strongest absorption peak of hydroxyapatite (OH^-) and water molecules. This lamp pumped long pulse laser delivers high energy output, exceptional stability and superior beam uniformity, making it an ideal solution for biomedical applications. Optional accessories include output fibers, articulated arms, control panels, power supplies, and water chillers.

Key Features

- Maximum single pulse energy up to 2J
- Built-in energy detector
- Built-in shutter

Applications

Periodontics

Implantology

Skin Rejuvenation

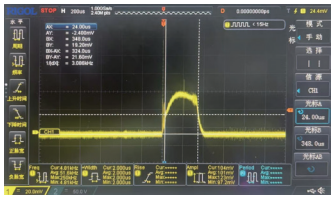
Technical Specifications

Wavelength (nm)	2940
Single Pulse Energy (mJ)	500mJ@20Hz, 2000mJ@10Hz
Pulse Width (μs)	300~500
Power (W)	20
Other Optical & System Parameters	
Beam Mode	Multi-mode
Output Method	Articulated arm output[1]
Laser energy stability (St)	±20% max.
Laser energy reproducibility (Rp)	±20% max.
Aiming Beam Wavelength	650±20nm, 532±20nm
Aiming Beam Power	>2mW
Working Conditions	Ambient temperature: 10°C~30°C
	Relative humidity: 10%~73% (non-condensing)
	Atmospheric pressure: 86kPa~106kPa
	Power supply: 220V/110V±10%AC, 50/60Hz

1. Supports optional fiber-coupled output. Please verify the coupled laser parameters with our sales team.
2. All the data in the above table are the typical values obtained from the tests at room temperature of 25°C, and the final data is subject to the final test report.



Beam profile



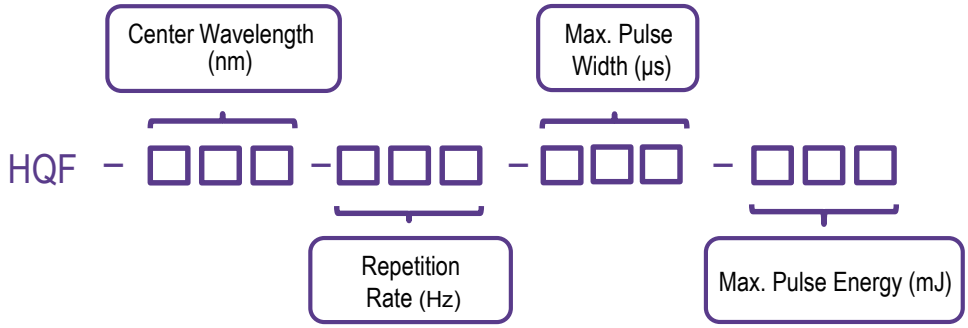
Typical pulse (2940nm)

RealLight

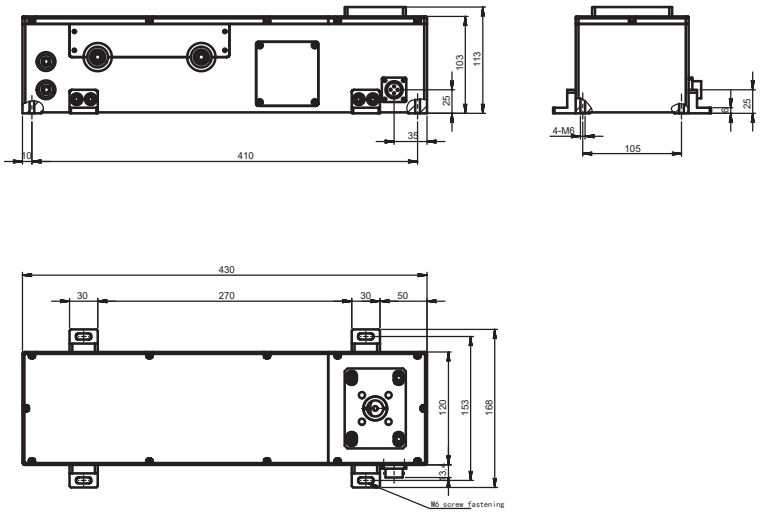
Order Information

Wavelength (nm)	Part Number	Repetition Rate (Hz)	Max. Pulse Width (μs)	Max. Pulse Energy (mJ)
2940	HQF-2940-10-500-2000	10	500	2000

Part Numbering Schema



Mechanical Drawings (in mm)



Compatible Accessories Available



Articulated arm



power supply

