

HQF Series Lamp-Pumped Long Pulse Laser

HQF series lamp pumped long pulse 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 medical and aesthetic applications. Optional accessories include output fibers, articulated arms, control panels, power supplies, and water chillers.

Key Features

- Maximum single pulse energy up to 1000mJ
- Superior beam uniformity
- Exceptional stability
- Compact, sealed design for high reliability

Technical Specifications

Applications

Periodontics Implantology Skin Rejuvenation Fractional Laser

Wavelength (nm)	2940nm				
Nominal Pulse Width (μs)	100~200	500			
Max. Repetition Rate (Hz)	40~50	10			
Max. Pulse Energy (mJ)	200	1000			
Max. Power (W)	8~10	10			
Other Optical & System Parameters					
Beam Mode	Multi-mode				
Output Method	Articulated arm output / Fiber output				
Laser energy stability (St)	±20% max.				
Laser energy reproducibility (Rp)	±20% max.				
Aiming Beam Wavelength	532±20nm				
Aiming Beam Power	>2mW, <5mW				
Working Conditions	Ambient temperature: 10°C~30°C				
	Relative humidity: 10%~73% (non-condensing)				
	Atmospheric pressure: 86kPa~106kPa				
	Power supply: AC220V, 50Hz, ≤10A				

1. 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 pulsewidth

Order Information

Wavelength (nm)	Part Number	Max. Repetition Rate (Hz)		Max. Pulse Energy (mJ)
2940	HQF-2940-50-500-1000	50	500	1000

Part Numbering Schema



Mechanical Drawings (in mm)





Compatible Accessories Available







Articulated arm

power supply