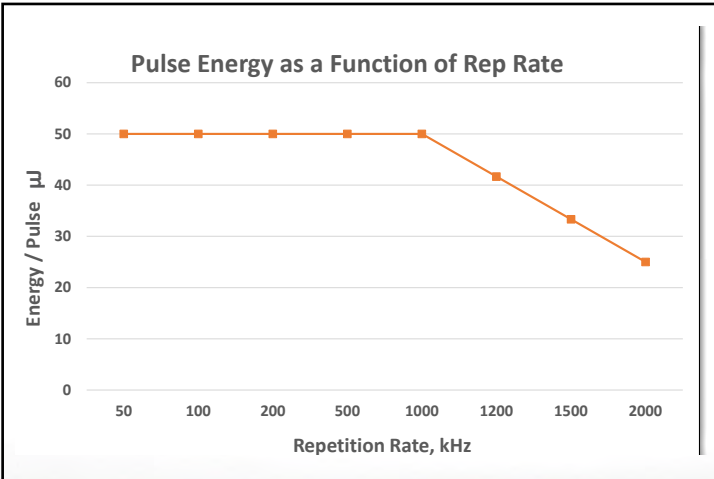


YLPF 250-500 fs, UP TO 50 W

All-Fiber Femtosecond Pulsed Lasers



Output Power up to 50 W
250 - 500 femtoseconds



FEATURES

- ▶ Wavelength 1030 nm
- ▶ Output Power up to 50 W
- ▶ Pulse Duration 250-500 fs
- ▶ Pulse Energy up to 50 µJ
- ▶ Repetition Rate up to 5.5 MHz
- ▶ Burst Mode Option
- ▶ Low-maintenance



APPLICATIONS

- ▶ Ophthalmology
- ▶ LED Dicing
- ▶ Life Sciences
- ▶ Solar Cell Structuring
- ▶ Precision Micromachining
- ▶ Photomask Cutting and Repair
- ▶ Medical Device Manufacturing
- ▶ Specialty Marking
- ▶ Microdrilling
- ▶ Fine Tube Cutting
- ▶ Thin Film Ablation

YLPF femtosecond fiber lasers provide pulses with up to 50 µJ pulse energy with scalable average output power up to 50 W and customer selected pulse durations in the range of 250-500 fs at full operational repetition rate range of 50-5500 kHz. The all fiber format allows for the adjustment of peak power and/or pulse repetition rate without affecting any of the output beam parameters. IPG novel fiber lasers are much more efficient and compact than conventional lasers now on the market and are ideal for applications in precision micromachining. The excellent beam quality, ultrashort pulse duration and high pulse energy combine to provide peak power densities for micromachining virtually any metal, glass, ceramic, silicon or plastic.

Models can be designed within specified maximum power 50 W, maximum pulse energy 50 µJ and pulse durations in 250-500 fs range. Burst mode option, shorter pulsed durations and higher pulse energies are available upon request.

YLPF 250-500 fs, UP TO 50 W

All-fiber Femtosecond Pulsed Lasers

Optical Characteristics*	YLPF-20-250-10-R	YLPF-20-250-20-R	YLPF-40-350-40-R	YLPF-50-500-50-R
Wavelength, nm	1030			
Mode of Operation	Pulsed			
Average Power, W	10	20	40	50
Pulse Energy, μ J	20	20	40	50
Pulse Duration, fs	250-500			
Repetition Rate, kHz	50-5500			
Beam Quality, M^2	<1.4, typ. <1.2			

* Preliminary

General Characteristics

Control Unit Dimensions (W x D x H), mm	448 x 418 x 133
Optical Head Dimensions (W x D x H), mm	65 x 370 x 70
Cooling	Water
Supply Voltage, VAC	Single-phase 50-60 Hz 100-240



+1 (508) 373-1100;
[IPGPhotonics.com/contact](https://www.ipgphotonics.com/contact)
www.ipgphotonics.com

MAX. CONTINUOUS OUTPUT POWER: 100 W
 PEAK OUTPUT POWER: 400 MW
 PULSE DURATION: 250-500 fs
 PULSE REPETITION RATE: 50-2000 kHz
 WAVELENGTH RANGE: 900-1200 nm

DANGER - INVISIBLE LASER
 RADIATION AVOID EYE OR SKIN
 EXPOSURE TO DIRECT OR
 SCATTERED RADIATION
 CLASS 4 LASER PRODUCT
 IEC 60825-1:2014

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