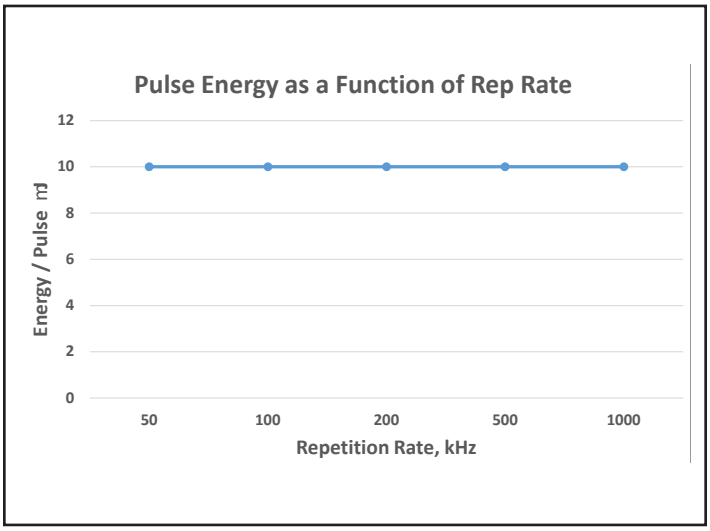
YLPF-10-500-10-R

Ytterbium Femtosecond Fiber Laser



10 W, <500 fs

Applications

- Life Sciences
- Ophthalmology
- Medical Device Manufacturing
- Microdrilling
- Fine Tube Cutting
- Thin-film Ablation
- LED Dicing
- Solar Cell Structuring
- Photomask Cutting and Repairing
- Specialty Marking

Features

- Wavelength 1030 nm
- Pulse Energy up to 10 µJ
- High Peak Power up to 100 MW
- Output Power >10 W
- Pulse Duration 500 fs
- Repetition Rate 1 MHz
- Low-maintenance
- Rugged Design

IPG Photonics' NEW YLPF Series femtosecond fiber lasers provide high peak power with max average output power of 10 W, short pulse duration of <500 fs at operational repetition rate range of 50-1000 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's novel fiber laser is much more efficient and compact than conventional lasers now on the market. It is ideal for applications in ophthalmology, life sciences and precision micromachining.

The excellent beam quality, ultrashort pulse duration and high pulse energy combine to provide peak power densities suitable for micromachining virtually any material: metal, glass, ceramic, silicon, plastics. The ultrashort pulse duration results in a very small heat affected zone. Higher output powers are planned.

YLPF-10-500-10-R

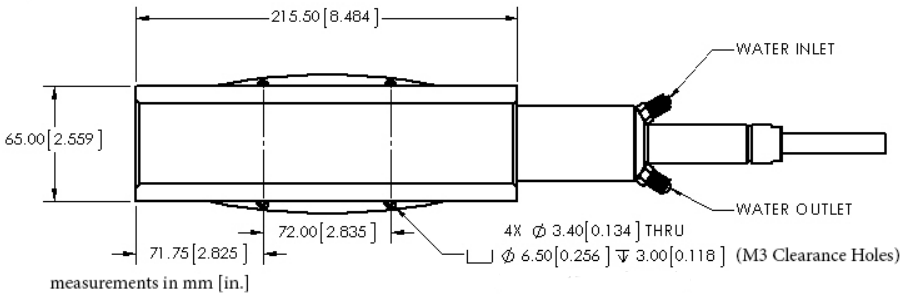
Ytterbium Femtosecond Fiber Laser

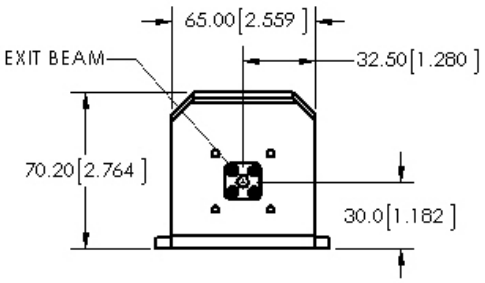
Optical Characteristics

Wavelength, nm	1030
Average Power, W	10
Pulse Energy, µJ	10
Pulse Duration, fs	<500
Peak Power, MW	up to 100
Repetition Rate, kHz	50-1000
Beam Quality, M^2	<1.4 (1.2 Typ.)

General Characteristics

Control Unit Dimensions (W × D × H), mm	448 × 580 × 132
Optical Head Dimensions (W × D × H), mm	370 × 82 × 60
Cooling	Water-cooled
Supply Voltage, VAC	100-240, 50/60 Hz
Power Consumption, W	150





Water-cooled Head

+1 (508) 373-1100
sales.us@ipgphotonics.com
www.ipgphotonics.com

MAX. CONTINUOUS OUTPUT POWER: 20 W
PEAK OUTPUT POWER: 200 MW
PULSE DURATION: 300-600 fs
PULSE REPETITION RATE: 50-1000 kHz
WAVELENGTH RANGE: 1000-1200 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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