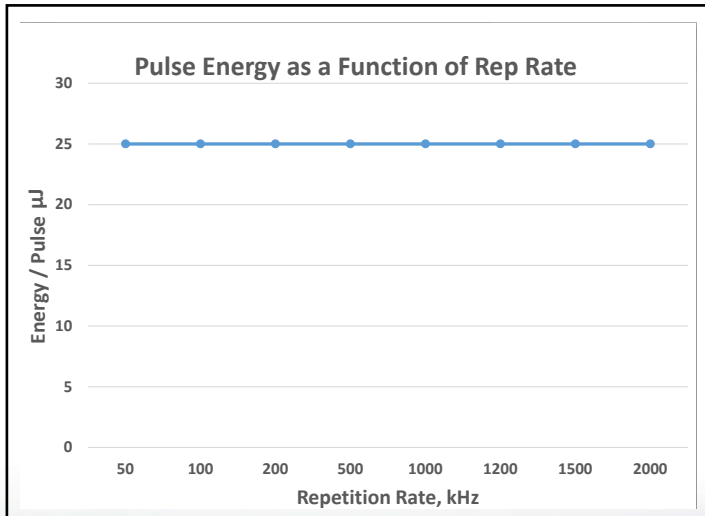


YLPP-1-5 ps, 10-50 W

All-Fiber Picosecond Pulsed Laser



**50 W Average Power
1 - 5 picoseconds**



FEATURES

- ▶ Wavelength 1030 nm
- ▶ Average Power 50 W
- ▶ Pulse Duration Options 1-5 ps
- ▶ Pulse Energy 25 μJ
- ▶ Repetition Rate 50 kHz to 5.5 MHz
- ▶ Ultra-Compact and Light Laser Head
- ▶ Burst Mode Option
- ▶ Warm Start in Seconds
- ▶ Cold Start in Seconds
- ▶ Integrated Delivery Fiber to Remote Head
- ▶ Integrated Scanner Option



APPLICATIONS

- ▶ Precision Micromachining
- ▶ Sapphire LED Wafer Scribing
- ▶ Black Marking of Stainless Steel or Aluminum
- ▶ Thin Film Ablation for Solar/PV/Flat Panel Display
- ▶ Surface Microstructuring & Texturing
- ▶ Cutting and Drilling Glass/Sapphire
- ▶ Multilayer Polymer Film Cutting
- ▶ Precise Marking of Metals/Polymers/Glass
- ▶ Battery and Thin Metal Foil Cutting
- ▶ Micromachining of Ceramics

YLPP-25-1-50-R ultrashort pulse fiber lasers provides pulses with 25 μJ pulse energy with scalable average output power of 50 W and selectable pulse durations in the range of 1 to 5 ps at full operational repetition rate range of 50-5500 kHz. IPG monolithic all-spliced-fiber design is “beyond state-of-the-art”, enabling an incredibly compact laser that is inherently more power efficient, reliable and robust than conventional bulk-rod or disk based DPSS USP lasers yet priced significantly lower than legacy products. The novel design architecture and flexible control electronics provide conveniently short warm-up times and allow adjustment of both pulse energy and repetition rate without affecting the output beam parameters.

Models can be designed within specified maximum power, maximum pulse energy and pulse durations in 1 to 5 ps range. Burst mode option, shorter pulsed durations and higher pulse energies are available upon request.

YLPP-1-5 ps, 10-50 W

All-Fiber Picosecond Pulsed Laser

Optical Characteristics		YLPP-25-1-50-R
Wavelength, nm		1030
Mode of Operation		Pulsed
Average Power, W		50
Pulse Energy, μ J		25
Pulse Duration, ps		1-5
Repetition Rate, kHz		50-5500
Beam Quality, M^2		<1.4 (1.2 Typ.)

General Characteristics		YLPP-25-1-50-R
Control Unit Dimensions, mm		448 × 580 × 132
Optical Head Dimensions, mm		65 × 370 × 70
Cooling		Water
Supply Voltage, Single-phase 50-60 Hz, VAC		100-240
Power Consumption, W		<300



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

MAX. AVERAGE OUTPUT POWER: 100 W
 MAX. PEAK OUTPUT POWER: 50 MW
 PULSE DURATION: 1-5 ps
 PULSE REPETITION RATE: 50-2,000 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