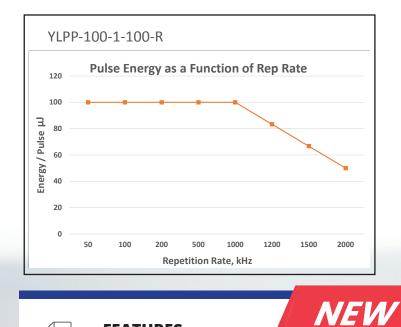


## YLPF/YLPP 0.6-5 ps, 50-100 W

### **High Pulse Energy Hybrid Fiber Lasers**



Up to 100 W 0.6 - 5 picoseconds



#### **FEATURES**



- ▶ Pulse Duration Options 0.6-5 ps
- ▶ Repetition Rate 50 kHz to 5.5 MHz
- ▶ Pulse Energy up to 200 µJ
- ▶ Ultra-compact Head
- ▶ Up to 4 m Delivery Fiber to Remote Head
- ▶ Integrated Scanner Option
- ▶ Cold and Warm Start in Seconds
- ▶ Burst Mode Option
- ▶ Integrated AOM Pulse Picker



#### APPLICATIONS

- ▶ Precision Micromachining
- ▶ Sapphire LED Wafer Scribing
- ▶ Surface Microstructuring and Texturing
- ▶ Thin Film Ablation for Solar/PV/Flat Panel Display
- ▶ Multilayer Polymer Film Cutting
- ▶ Cutting & Drilling Glass/Sapphire
- ▶ Battery and Thin Metal Foil Cutting
- ▶ Micromachining of Ceramics



YLPF and YLPP Hybrid-fiber ultrafast lasers provide high peak power with scalable average output power up to 100 W and customer selected pulse durations in the range from 600 fs to 5 ps at full operational repetition rate range of 50-5500 kHz. IPG 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 lasers, yet priced significantly lower than the legacy products. The novel design architecture and flexible control electronics provide conveniently short warm-up times and allows adjustment of both pulse energy and repetition rate without affecting the output beam parameters.

Models can be designed with specified power, pulse energy and pulse durations in 600 fs to 5 ps range. Burst mode option, shorter pulse durations and higher pulse energies are available upon request.

# YLPF/YLPP 0.6-5 ps, 50-100 W

### **High Pulse Energy Hybrid Fiber Lasers**

Optical Characteristics*	YLPF-200-750-50-R	YLPF-100-750-100-R	YLPP-200-1-50-R	YLPP-100-1-100-R	
Wavelength, nm	1030				
Mode of Operation		Pulsed			
Maximum Average Power, W	50	100	50	100	
Pulse Energy, μJ	200	100	200	100	
Pulse Duration Options, ps	600-900		1-5		
Repetition Rate, kHz	50-5500				
Beam Quality, M <sup>2</sup>	<1.4 (1.2 Typ.)				

General Characteristics*	YLPF-200-750-50-R	YLPF-100-750-100-R	YLPP-200-1-50-R	YLPP-100-1-100-R	
Control Unit Dimensions (W $\times$ D $\times$ H), mm	448 × 580 × 132				
Optical Head Dimensions (W $\times$ D $\times$ H), mm	82 × 271 × 124				
Cooling	Water				
Optical Head Weight, kg	4				
Supply Voltage, VAC	Single-phase 50-60 Hz, 100-240				
Power Consumption, W	<1000				



+1 (508) 373-1100;

IPGPhotonics.com/contact

www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 200 W
MAX. PEAK OUTPUT POWER: 300 MW
PULSE DURATION: 600-900 fs
PULSE REPETITION RATE: 50-2,756 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