

# YLPN 25-100 mJ

## High Pulse Energy Fiber Lasers

High Brightness up to 2 kW  
for Wider Working Field  
and Faster Scanning



**NEW**



### FEATURES

- ▶ Pulse Duration 20-100 ns
- ▶ Average Power up to 2000 W
- ▶ Pulse Energy 100 mJ
- ▶ Excellent Pointing Stability
- ▶ Round or Square Processing Fiber
- ▶ High Brightness Enabling Faster Scanning
- ▶ High Brightness for Wider Working Field
- ▶ Maintenance-free Operation
- ▶ Water-cooled
- ▶ Compact Rugged Design
- ▶ High Wall-Plug Efficiency



### APPLICATIONS

- ▶ Paint Stripping
- ▶ Coating Removal
- ▶ Surface Treatment
- ▶ Texturing

IPG Photonics offers **YLPN High Power Series of high power nanosecond pulsed ytterbium fiber lasers** with pulse energy up to 100 mJ and pulse duration from 20 to 100 ns. These powerful models are optimized for high throughput surface treatment applications such as paint stripping, coating removal, surface cleaning and texturing. Average output powers are up to 2 kW and the repetition rates vary from 2 to 100 kHz. The exceptionally high brightness enables faster scanning speeds and wider working fields resulting in higher throughput. These highly efficient water-cooled fiber lasers are packaged in compact rugged 6U 19" rack-mounted units.

# YLPN 25-100 mJ

## High Pulse Energy Fiber Lasers

Optical Characteristics	up to 50 mJ	up to 100 mJ
Wavelength, nm	1064 ±2	
Mode of Operation	Pulsed	
Average Power, W	500	500, 1000 Standard Brightness 1000, 2000 High Brightness
Pulse Energy, mJ	25-50	30-100
Pulse Duration, ns	20-100	20-100
Repetition Rate Range, kHz	2-100	2-50
Optical Termination	Optical Head Free space collimated output	Processing Fiber, round or square QBH compatible HLC-8 connector
Output Beam Diameter Range, mm	2-9	—
Process Fiber Size, μm	—	Standard brightness 400, 600 High brightness 300 or 400
Beam Parameter Product, mm × mrad	~ 9	@ 400 μm round core fiber Standard brightness BPP <24 High brightness BPP <13

General Characteristics	500 W	1000 W	2000 W
Console Dimensions (W × D × H), mm	449 × 716 × 266		
Optical Head Dimensions (W × D × H), mm	115 × 393 × 93		
Weight, kg	~ 70	~ 95	
Cooling	Water		
Supply Voltage, VAC	230	3-phase 400-480	
Power Consumption, W	2400	4000	7000



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MAX. AVERAGE OUTPUT POWER: 4 kW  
 MAX. PEAK OUTPUT POWER: 10 MW  
 PULSE DURATION: 15-120 ns  
 PULSE REPETITION RATE: 2-100 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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