

YLPP-YLPN 0.15-5 ns, 30-80 W

Adjustable Pulse Duration Modules

Adjustable Pulse
Duration 0.15 to 5 ns



FEATURES

- ▶ Pulse Energy up to 1 mJ
- ▶ Adjustable Pulse Duration 0.15 to 5 ns
- ▶ Power up to 80 W
- ▶ Repetition Rate up to 4 MHz
- ▶ Rugged Design



APPLICATIONS

- ▶ Materials Processing
- ▶ Micromachining
- ▶ Solar/Photovoltaic
- ▶ Marking
- ▶ Texturing
- ▶ Ablation
- ▶ Scribing

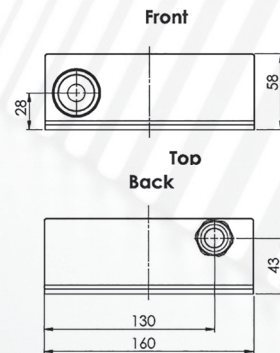
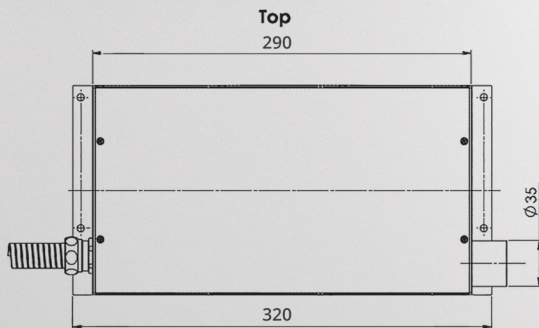
IPG YLPP-YLPN Adjustable Pulse Duration fiber lasers provide up to 1 mJ of pulse energy at variable pulse durations ranging from 150 ps to 5 ns. The repetition rate ranges from 2 kHz to 4 MHz. The all fiber format allows for the adjustment of pulse energy and/ or pulse repetition rate without affecting any of the output beam parameters. This novel fiber laser is much more efficient and compact than conventional lasers now on the market and is ideal for applications in the solar/ photovoltaic arena, resistor trimming and marking of transparent materials.

YLPP-YLPN 0.15-5 ns, 30-80 W

Adjustable Pulse Duration Modules

Optical Characteristics	YLPP-1-150×3500-30-M	YLPN-0.5-1×5-80-M
Wavelength, nm	1060	
Mode of Operation	Pulsed	
Average Power, W	up to 30	up to 80
Power Tunability, %	10 - 100	
Pulse Energy, mJ	up to 1	up to 0.5
Preset Pulse Duration Modes, ns	0.15; 1.0; 2.0; 5.0	1.0; 2.0; 5.0
Nominal Pulse Repetition Rate, kHz	600 @ 150 ps; 100 @1 ns; 60 @2 ns; 30 @3.5 ns	800 @ 1 ns; 400 @2 ns; 160 @5 ns
Extended Repetition Rate Range, kHz	2-1000	10-4000
Beam Quality, M ²	<1.5	<1.7

General Characteristics		
Control Unit Dimensions (W × D × H), mm	215 × 286 × 95	215 × 286 × 140
Optical Head Dimensions (W × D × H), mm	160 × 320 × 58	
Control Unit Cooling	Forced Air	
Optical Head Cooling	Thermoconductive Bottom	
Supply Voltage, VDC	24	
Power Consumption, W	Typ. < 250	Typ. < 350



IPGPhotonics.com/contact
www.ipgphotonics.com

MAX. CONTINUOUS OUTPUT POWER: 160 W
 MAX. PEAK OUTPUT POWER: 1 MW
 PULSE DURATION: 0.15-5 ns
 PULSE REPETITION RATE: 2-4000 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