



YLPP-1-150×5000-50-M

Ytterbium Picosecond Fiber Laser

NEW PRODUCT



Applications

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



Features

- ▶ Pulse Energy up to 1 mJ
- ▶ Adjustable Pulse Duration
- ▶ High Peak Power up to 330 kW
- ▶ Repetition Rate up to 1 MHz
- ▶ Rugged Design

IPG's YLPP Adjustable Pulse Duration picosecond fiber laser provides up to 1 mJ of pulse energy at variable pulse durations ranging from 150 ps to 5 ns. The repetition rate range is from 30 kHz to 1 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. The ultrashort pulse duration and high peak power result in a very small heat affected zone.

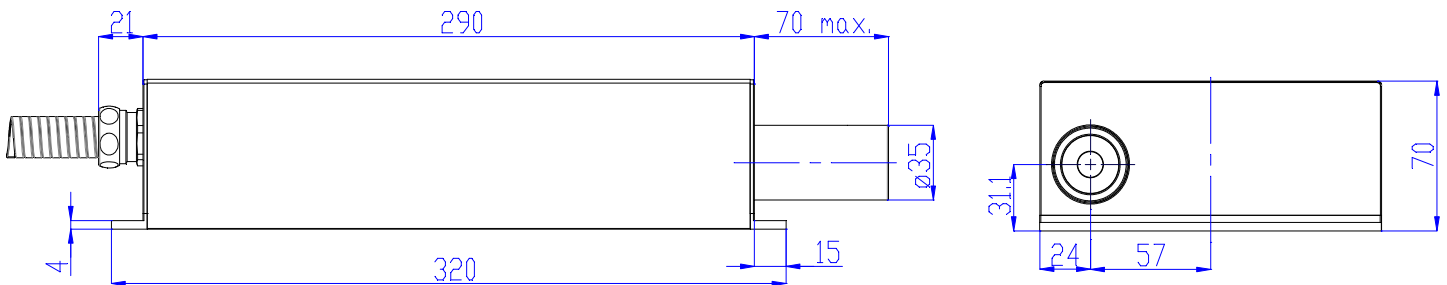
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Ytterbium Picosecond Fiber Laser

Optical Characteristics	??	??	??	??
Wavelength, nm	1060			
Mode of Operation	Pulsed			
Average Power, W	50			
Power Tunability, %	10-100			
Pulse Energy, mJ	up to 1			
Pulse Duration Options, ns	0.15	1.0	2.0	5.0
Peak Power, kW	up to 330			
Repetition Rate*, kHz	600	100	60	30
Beam Quality, M ²	<1.8			

* Extended pulse repetition mode up to 1 MHz

General Characteristics	
Control Unit Dimensions (W × D × H), mm	215 × 286 × 95
Optical Head Dimensions (W × D × H), mm	162 × 320 × 70
Control Unit Cooling	Air-cooled
Optical Head Cooling	Thermoconductive Bottom
Supply Voltage, VDC	24
Power Consumption, W	<250



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MAX. CONTINUOUS OUTPUT POWER: 100 W
 MAX. PEAK OUTPUT POWER: 1 MW
 PULSE DURATION: 0.15-5 ns
 PULSE REPETITION RATE: 30-1000 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

The Power to Transform®