

YLPP-1-150x5000-30-M Ytterbium Picosecond Fiber Laser







Applications

- Materials Processing
- Micromachining
- Solar/ Photovoltaic
- ▶ Marking

- TexturingAblation
- Scribing
- Scribing

Pulse Energy up to 1 mJ
Adjustable Pulse Duration

Features

- 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.



YLPP-1-150x5000-30-M

Ytterbium Picosecond Fiber Laser

Optical Characteristics

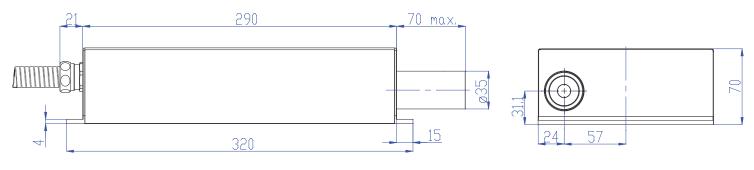
Wavelength, nm	1060			
Mode of Operation	Pulsed			
Average Power, W	30			
Power Tunability, %	10-100			
Pulse Energy, mJ	up to 1			
Pulse Duration Options, ns	0.15	1.0	2.0	5.0
Peak Power, kW	up to 330			
Repetition Rate ¹ , kHz	600	100	60	30
Beam Quality, M ²	<1.8			
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¹Extended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

General Characteristics

Control Unit Dimensions, mm	215 x 286 x 95		
Optical Head Dimensions, mm	162 x 320 x 70		
Control Unit Cooling	Air-cooled		
Optical Head Cooling	Thermoconductive Bottom		
Supply Voltage, VDC	24		
Power Consumption, W	<250		

Head Dimensions



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