YLPN-M

Adjustable Pulse Duration Fiber Laser Modules

Air-Cooled
up to 500 W

FEATURES

- Pulse Energy up to 2 mJ
- Average Power up to 500 W
- Pulse Repetition Rates 2-4000 kHz
- Over 25% Wall-plug Efficiency
- Instant Modulation Response
- Excellent Pointing Stability
- Maintenance-free Operation
- Full Flexibility in Operating Parameters

APPLICATIONS

- High Speed Marking
- Trimming
- Coating Removal
- Scribing
- Surface Treatment
- Texturing
- High Speed Cutting
- High Speed Engraving

YLPN-M nanosecond ytterbium fiber lasers provide average output power up to 500 W and adjustable pulse waveforms in the range of 20-500 ns. The lasers are triggered externally in a wide range of pulse repetition rates 2-4000 kHz, offers pulse energy of up to 2 mJ and the ability to scale average power independent of the energy. An output isolator ensures high output power stability and allows to process highly reflective materials.

This YLPN lasers are small air-cooled maintenance-free modules designed for OEM applications. The robust all fiber design packaged into a rugged case allows operation in harsh industrial environments. The all fiber format allows for the adjustment of peak power and/or pulse repetition rate without affecting any of the output beam parameters. These fiber lasers are much more efficient and compact than conventional lasers on the market. Fine processing of thin foils and coating as well as treatment of surfaces is easy to adjust using wide range of operating parameters. It is ideal for applications in micromachining, scribing, texturing, ablation, the solar/photovoltaic arena, hole drilling, resistor trimming and marking.

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Adjustable Pulse Duration Fiber Laser Modules

Optical Characteristics	YLPN-2-20×500-200	YLPN-2-20×500-300	YLPN-2-20×500-500
Wavelength, nm		1064	
Mode of Operation		Pulsed	
Maximum Average Power, W	200	300	500
Power Tunability, %		10-100	
Pulse Energy, mJ		0.2 -2	
Pulse Duration, ns		20-500	
Repetition Rate, kHz		2-4000	
Power Stability, %		±2	
Beam Quality, M^2		~ 1.5	

General Characteristics			
Module Dimensions (W × D × H), mm	270 × 441× 151		342 × 433× 151
Optical Head Dimensions (L × diam), mm	317 × 48		
Cooling	Air-cooled		
Supply Voltage, VDC	48		
Power Consumption, W	Typ. 700	Typ. 1000	Typ. 1500

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