

YLPN 2 mJ, up to 2 kW

Pulsed Lasers for Micromachining

On-the-fly Pulse Duration Adjustment up to 1 kW

NEW



FEATURES

- ▶ Pulse Duration 20-2000 ns
- ▶ CW Mode Option
- ▶ On-the-fly Pulse Duration Adjustment up to 1 kW
- ▶ Average Power up to 2 kW
- ▶ Pulse Energy up to 2 mJ
- ▶ High Beam Mode Quality
- ▶ Excellent Pointing Stability
- ▶ Advanced Safety Electronics
- ▶ Maintenance-free Operation
- ▶ Water-cooled
- ▶ High Wall-plug Efficiency



APPLICATIONS

- ▶ Battery Foil Cutting
- ▶ Foil Texturing
- ▶ Paint Stripping
- ▶ Coating Removal
- ▶ Hairpin Ablation
- ▶ Micro-welding



These **YLPN** high power pulsed ytterbium fiber lasers offer a combination of excellent beam mode quality, variable pulse duration, high average power and wide range of pulserепetition rates. The laser pulse duration can be adjusted on the fly for models up to 1 kW average power.

These powerful lasers are optimized for high throughput E-mobility applications such as foil cutting, foil structuring, foil cleaning, hairpin ablation and micro-welding. Compact and rugged, these rack-mounted water-cooled laser sources provide reliable, consistent high-speed processing across a wide range of materials and applications for EV manufacturing.

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Pulsed Lasers for Micromachining

Optical Characteristics	YLPN-1000-R	YLPN-2000-R
Wavelength, nm	1064 ±2	
Mode of Operation	Pulsed	
Average Power, W	1000	2000
Pulse Energy, mJ	0.0125-2	0.025-2
Pulse Duration, ns	20-2000, CW mode option	
Repetition Rate Range, kHz	25-8000	100-8000
Optical Termination	Optical Head	
Beam Quality, M ²	typ. 1.5	<2.0, typ. 1.8

General Characteristics	YLPN-1000-R	YLPN-2000-R
Console Dimensions (W × D × H), mm	450 × 768 × 177	450 × 809 × 266
Optical Head Dim. (W × D × H), mm	115 × 393 × 93	
Weight, kg	<47	<95
Cooling	Water	
Supply Voltage, VAC	3-phase 400-480, 50-60 Hz	
Power Consumption, kW	4	7



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MAX. AVERAGE OUTPUT POWER: 4 kW
 MAX. PEAK OUTPUT POWER: 100 kW
 PULSE DURATION: 20-2000 ns
 PULSE REPETITION RATE: 25-8,000 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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