

# YLM-250/2500-QCW

## Single-mode Quasi-CW Ytterbium Fiber Lasers



### Applications

- ▶ Replacement for Lamp-pumped Lasers
- ▶ Spot Welding
- ▶ Seam Welding
- ▶ Microwelding
- ▶ Drilling
- ▶ Cutting
- ▶ Batteries
- ▶ Medical Devices
- ▶ Computer Components



### Features

- ▶ Outstanding Pulse Power/ Energy Stability
- ▶ >30% Wall-plug Efficiency
- ▶ CW & Pulsed Modes
- ▶ Perfect Beam Quality
- ▶ Beam Quality Optimized for Applications
- ▶ Internal Pulse Generator & Pulse Shaping
- ▶ Low Cost High Peak Power
- ▶ Compact Rugged Design

IPG's quasi-continuous wave (QCW) fiber lasers are available for requalifying existing lamp-pumped processes at IPG's application facilities and applications labs. QCW fiber lasers are ideal for spot welding, seam welding & drilling in the long pulse operation mode. These air-cooled, compact units are substantially more cost-effective than conventional YAG lasers due to >30% wall-plug efficiencies and maintenance-free operation. Retrofit services, including engineers familiar with system integration, are available to help customers replace older production lasers with energy-efficient fiber lasers from IPG. The QCW Series features 19" rack mounted units and highly cost-effective OEM modules.

# YLM-250/2500-QCW

## Single-mode Quasi-CW Ytterbium Fiber Lasers

### Optical Characteristics

	YLM-75/750-QCW	YLM-150/1500-QCW	YLM-250/2500-QCW Preliminary
Wavelength, nm		1070 ±5	
Mode of Operation		Pulsed/ CW	
Modulation Frequency, kHz		0-50	
Max. Average Power CW/QCW, W	125/75	250/150	400/250
Max. Peak Power, W	750	1500	2500
Max. Pulse Energy, J	7.5	15	25
Pulse Duration <sup>1</sup> , ms		0.05-50	
Power Tunability, %		10-100	
Power Stability <sup>2</sup> , %		±0.1	
Beam Quality, M <sup>2</sup>		1.05	

<sup>1</sup>The minimum pulse duration is 10 microseconds upon request

<sup>2</sup>Over 4 hours, T=const

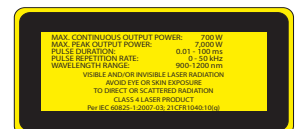
### General Characteristics

Module Dimensions (WxDxH), mm	336 x 435 x 148
Weight, kg	<25
Cooling	Air-cooled
Supply Voltage, VDC	48
Power Consumption, W	<1000

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