

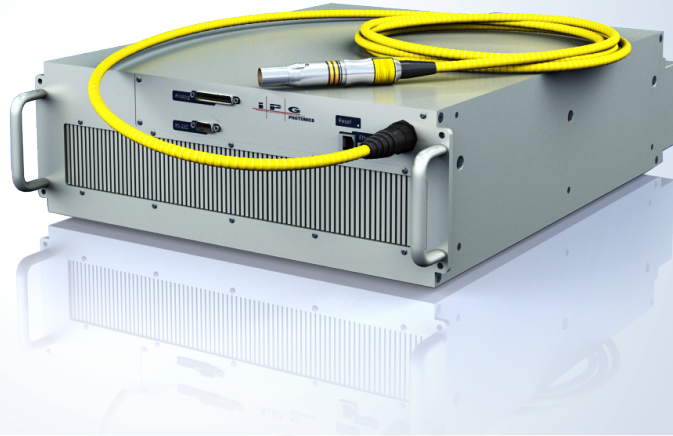


# YLM-600/6000-QCW

## Multi-mode Quasi-CW Fiber Laser

NEW PRODUCT

6 kW Peak Power QCW Module  
Ideal Replacement for  
Lamp Pumped YAG Lasers



### Applications

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



### Features

- ▶ Continuous Wave and Pulsed Modes
- ▶ Outstanding Pulse Power/Energy Stability
- ▶ >30% Wall-plug Efficiency
- ▶ Excellent Beam Parameter Product
- ▶ Internal Pulse Generator and Pulse Shaping
- ▶ Air-cooled 6 kW Peak Power

IPG has expanded its quasi continuous wave (QCW) fiber laser series to higher power models including the NEW **YLM-600/6000-QCW** laser. The new modules are more powerful and feature compact size and lower price per Watt. Short modulation time and temporal pulse shaping enable improved control and quality in micromachining applications. The QCW fiber lasers are ideal for spot welding, drilling and cutting in the long pulse operation mode. These compact units are substantially more cost-effective than conventional YAG lasers due to >30% wall-plug efficiency and maintenance-free operation. The QCW fiber lasers are available for requalifying existing lamp-pumped processes. Retrofit services, including engineers familiar with system integration, are available to help customers replace older production lasers with energy-efficient fiber lasers from IPG. Both air-cooled and water-cooled OEM modules are available.

# YLM-600/6000-QCW

## Multi-mode Quasi-CW Fiber Laser

### Optical Characteristics

Wavelength, nm	1070 ±5
Mode of Operation	Pulsed/CW
Modulation Frequency, kHz	0-50
Max. Average Power, W	600
Max. Peak Power, W	6000
Max. Pulse Energy, J	60
Pulse Duration*, ms	0.05-50
Power Tunability, %	10-100
Power Stability**, %	±0.5
Output Fiber Core Diameter, µm	50, 100, 200
Beam Parameter Product, mm × mrad	2.5, 5, 10

\* The minimum pulse duration is 10 microseconds upon request

\*\* Over 4 hours, T=const

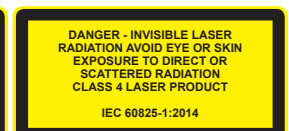
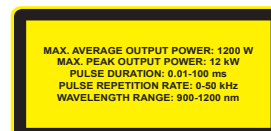
### General Characteristics

	YLM-600/6000-QCW-AC	YLM-600/6000-QCW-WC
Dimensions (W × D × H), mm	416 × 566 × 148	411 × 509 × 85
Weight, kg	<35	
Cooling	Air-cooled	Water-cooled
Supply Voltage, VDC	48	
Wall-plug Efficiency, %	<30	

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