

# SHORT PULSE YTTERBIUM FIBER LASER



The Power to Transform<sup>®</sup> using the  
YLPM-0.3-A1-60-18 SHORT PULSE  
YTTERBIUM FIBER LASER

**NEW  
PRODUCT**

## FIRST TIME IN THE LASER INDUSTRY

Expedite your Process Optimization Time

Change Any or All of these Parameters:

Pulse Duration

Pulse Energy

Pulse Repetition Rate

No Impact on Output Beam



**IPG's NEW** short pulse fiber lasers provide a high peak power with scalable average output power >18 W, variable pulse duration of 1-10 ns and frequency of 10-600 kHz. Featuring  $M^2$  of <1.3, the 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. Higher output powers are planned.

### Features:

- Wavelength: 1060 nm
- Mode of Operation: Pulsed
- High Peak Power
- Short Pulse Duration
- Output Power: >18 W
- Air-cooled

### Typical Applications:

- Solar/ Photovoltaic
- Micromachining
- Marking
- Materials Processing
- Texturing
- Ablation

## Model YLPM-0.3-A1-60-18

### 1.0 Optical Characteristics

Central Emission Wavelength, nm	1060		
Mode of Operation	Pulsed		
Polarization State	Random		
Repetition Rate, kHz	10-600		
Nominal Average Output Power, W	18		
Pulse Duration (FWHM), ns	1	5	10
Pulse Energy, $\mu$ J	60	200	300
Short-term Pulse Energy Instability, RMS*, %	<2		
Beam Quality, $M^2$	<1.3		

\* measured at fixed operating temperature

### 2.0 General Characteristics

Supply Voltage, VDC	24
Supply Current, A	<6
Armored Cable Head-to-Driver Length, m	5
Model Dimensions, mm	270 x 260 x 86
Output Head Dimensions, mm	220 x 102 x 71
Output Head Weight, kg	2

### 3.0 General Qualifications

Operating Temperature Range, $^{\circ}$ C	+10 - +40
Storage Temperature, Noncondensing, $^{\circ}$ C	-10 - +60
Cooling	Forced Air

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