



YLR-1070-MM Series

Ytterbium Multi-mode Fiber Lasers

NEW PRODUCT

Applications

- ▶ Cutting
- ▶ Drilling
- ▶ Welding
- ▶ Heat Treating
- ▶ Advanced Applications

Features

- ▶ Any Power up to 2 kW
- ▶ Excellent Beam Parameter Product
- ▶ Constant BPP over Entire Power Range
- ▶ Small Focus over Large Working Distance
- ▶ Over 40% Wall-plug Efficiency
- ▶ Modulation up to 50 kHz
- ▶ Maintenance-free Operation
- ▶ Compact, Rugged and Easy to Install
- ▶ Smallest Volume to Power Ratio
- ▶ Wide Range of Beam Delivery Options



IPG Photonics' YLR-MM Series represents a new generation of diode-pumped CW fiber lasers in world leading small form factor, with a unique combination of high power, ideal beam quality, fiber delivery and high wall-plug efficiency. The YLR-MM is offered as a cost effective, adaptable solution for a clean room system or for integration into a production line. The high brightness YLR-MM lasers feature standard 50 μm core feeding fiber high with beam parameter product <2 .

Featuring a touch panel display or rear control via Analog, RS-232 or Ethernet interfaced, the rack mount configuration is ideal for a multitude of applications from cutting, welding and drilling to medical device manufacturing. Output powers are available up to 2 kW. Beam delivery options include coupler, beam switch (time or energy share) and delivery optics such as cutting and welding heads.

YLR-1070-MM Series

Ytterbium Multi-mode Fiber Lasers

| Optical Characteristics | YLR-500* | YLR-500* | YLR-1000 | YLR-1500 | YLR-2000 |
|-----------------------------------|--------------|----------|----------|----------|----------|
| Central Wavelength**, nm | 1070 ±10 | | | | |
| Mode of Operation | CW/Modulated | | | | |
| Modulation Frequency, kHz | 0-50 | | | | |
| Max. Average Power, W | 500 | 700 | 1000 | 1500 | 2000 |
| Power Tunability, % | 10-100 | | | | |
| Beam Parameter Product, mm × mrad | <2, <5, <15 | | | | |

*Available at 100, 200, 300 or 400 W

**Available at 1030 nm up to 1000 W

| General Characteristics | | | | | |
|------------------------------------|----------------------|-----|-----------------|-----|-----------------|
| Cabinet Dimensions (W × D × H), mm | 448 × 580 × 133 | | 448 × 680 × 177 | | 448 × 798 × 177 |
| Weight, kg | <30 | <50 | <70 | <80 | |
| Cooling | Air- or Water-cooled | | Water-cooled | | |

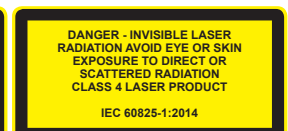
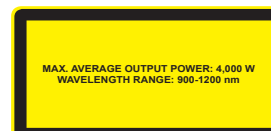
YLR-MM Multi-mode lasers are equipped with a standard 50 µm feeding fiber to HLC-8 connector. Additional options include 100 or 200 µm diameters to the HLC-8 connector or 50, 100 or 200 µm to an affixed collimator. Focal lengths at 20, 38 or 53 mm are available.

IPG manufactures a complete suite of optical beam delivery components including delivery fiber and optics, collimators, beam couplers, switches and sharers, and processing heads and scanners, as well as process control and tooling solutions. Interchangeable collimators and processing heads connect easily to the HLC-8.

+1 (508) 373-1100; sales.us@ipgphotonics.com
 +49 2736 44200; sales.europe@ipgphotonics.com (European Inquiries)

www.ipgphotonics.com

Legal notices: All product information is believed to be accurate and is subject to change without notice. Information contained herein shall legally bind IPG only if it is specifically incorporated into the terms and conditions of a sales agreement. Some specific combinations of options may not be available. The user assumes all risks and liability whatsoever in connection with use of a product or its application. IPG, IPG Photonics, The Power to Transform and IPG Photonics' logo are trademarks of IPG Photonics Corporation. © 2018 IPG Photonics Corporation. All rights reserved.



The Power to Transform®