



# YLS-U Series

## Ultra-compact Ytterbium Fiber Lasers

NEW PRODUCT



### Applications

- ▶ 2D/3D Thin and Thick Cutting
- ▶ Processing Copper, Brass and Aluminum
- ▶ Stainless and Mild Steel Cutting
- ▶ Welding



### Features

- ▶ Output Power 1-10 kW
- ▶ Ultra-compact Size
- ▶ Excellent Beam Parameter Product
- ▶ Constant BPP over Entire Power Range
- ▶ Wall-plug Efficiency >40%
- ▶ Fiber Delivery 50, 100, 150  $\mu\text{m}$
- ▶ Internal Dehumidifier
- ▶ Modular 'Plug and Play' Design
- ▶ Rugged and Easy to Install
- ▶ Maintenance-free Operation
- ▶ Cost-effective Cutting System

The Smallest Form Factor kW-class Industrial Fiber Lasers



IPG's NEW **YLS-U Series** is developed specifically for applications where laser system size is critical. YLS-U laser provide up to 10 kW average power in the smallest form factor available on the market. Having full featured interfaces and safety electronics of the new generation IPG fiber lasers, YLS-U design is cost/performance optimized, making it an ideal choice for emerging markets. The YLS-U lasers can be easily integrated within cutting machines. Internal dehumidifier enables the laser to be used in the harshest of production environments.

# YLS-U Series

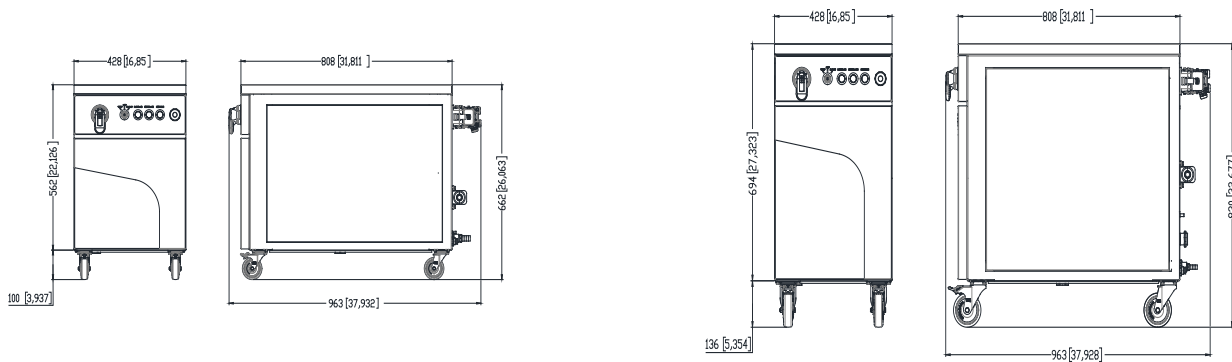
## Ultra-compact Ytterbium Fiber Lasers

### Optical Characteristics

Wavelength Range, nm	1074 ±6									
Mode of Operation	CW/Modulated									
Modulation Frequency, kHz	10									
Max. Average Power*, kW	1	2	3	4	5	6	7	8	9	10
Power Tunability, %	10-105									
Power Stability over 8 hrs, %	±1 Typ.									
Output Fiber Core Diameter, μm	50, 100, 150, 200									
Beam Parameter Product, mm × mrad	2.0, 3.3, 5.0, 6.0									

### General Characteristics

Dimensions (W × D × H), mm	1-3 kW: 430 × 804 × 568 4-6 kW: 1005 × 804 × 702 7-10 kW: 430 × 804 × 900
Weight, kg	140, 200, 250
Cooling	Water
Supply Voltage, 3-phase, 50/60 Hz, VAC	400-460
Wall-plug Efficiency, %	>40



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

[www.ipgphotonics.com](http://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. © 2016-19 IPG Photonics Corporation. All rights reserved.

MAX. AVERAGE OUTPUT POWER: 20 kW  
MAX. PEAK OUTPUT POWER: 20 kW  
PULSE DURATION: 0.2-2 ms  
PULSE REPETITION RATE: 50 Hz-10 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

**The Power to Transform®**