



YLS-HPP Series

High Peak Power Option

NEW PRODUCT



Applications

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



Features

- ▶ 2x Peak Power Increase in Pulsed Mode
- ▶ Reduced Heat Input
- ▶ Higher Quality Cuts of Fine Features
- ▶ Improved Quality of Heat-sensitive Parts
- ▶ Higher Piercing Quality
- ▶ Shorter Piercing Time
- ▶ Piercing of Thicker Materials
- ▶ Enhanced Welding and Drilling Capabilities
- ▶ Denser Part Nesting- Reduced Material Wastage

High Peak Power Pulsed Mode for Improved Pierce Time, Pierce Quality or Piercing of Thicker Material



IPG NEW **YLS-HPP Series** lasers feature High Peak Power option enabling users to run a CW laser in pulsed mode with a two-fold increase in peak power in comparison with CW average power. The high peak power improves the performance customers receive in their laser cutting applications, allowing increase in piercing speed, improvement in piercing quality and piercing of thicker materials. The reduced heat input in the Peak Power mode results in higher quality cuts of intricate parts with fine features in the corners while reducing overall laser power requirements. The Peak Power also enhances drilling capabilities by allowing clean, controlled drilling in thicker materials. High Peak Power Option in cutting applications means shorter “lead-ins” and denser part nesting, which reduces material waste and saves the customer money. Available exclusively from IPG, the Peak Power will provide improved cutting and drilling quality and increased overall throughput, while saving material, time and operating costs.

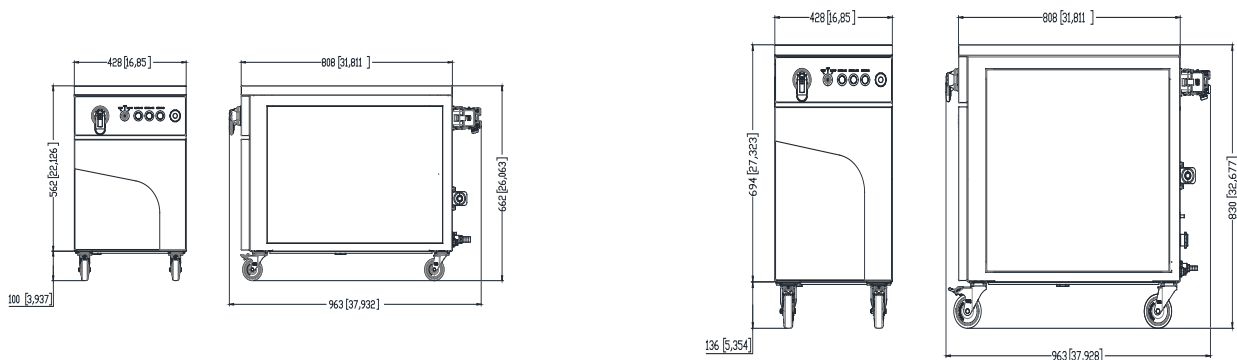
YLS-HPP Series

High Peak Power Option

Optical Characteristic	3000/5000	5000/10000	6000/10000
Wavelength Range, nm	1074 ±6		
Mode of Operation	CW/Modulated, QCW Pulsed		
Modulation Frequency in CW Regime, kHz	10		
Pulse Repetition Rate in QCW Regime, Hz	50-500		
Max. Average Power in CW Mode**, kW	3	5	6
Max. Peak Power in Pulsed Mode, kW	6	10	
Pulse Width in QCW Regime, ms	0.2-2		
Power Tunability in CW Regime, %	10-105		
Power Stability over 8 hrs, %	±1 Typ.		
Output Fiber Core Diameter, μm	50, 100, 150, 200		100, 150, 200
Beam Parameter Product, mm × mrad	2.0, 3.3, 5.0, 6.0		3.3, 5.0, 6.0

General Characteristics

Dimensions (W × D × H), mm	428 × 808 × 568	428 × 808 × 702
Weight, kg	140	190
Cooling	Water	
Supply Voltage, 3-phase, 50/60 Hz, VAC	400-460	
Wall-plug Efficiency, %	>40	



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MAX. AVERAGE OUTPUT POWER: 12 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®