

# YLS-ECO SERIES

## **Highest-Efficiency High-Power Fiber Lasers**

## **IPG ECO SERIES**

FIBER LASERS ARE UP TO

**2X** 

MORE ENERGY EFFICIENT THAN OTHER FIBER LASERS





## **FEATURES**

- ▶ 20 30 kW Continuous Wave Laser Power
- **▶ 50% Energy Efficient**
- ▶ Low Operating Cost
- ▶ Maintenance-free Operation
- ▶ Record Reliability & Stability
- ▶ Compact & Rugged Design



#### **APPLICATIONS**

- ▶ 2D/3D Thin & Thick Cutting
- ▶ Processing Copper, Brass & Aluminum
- ▶ Stainless & Mild Steel Cutting
- ▶ Welding
- ▶ Drilling
- Cladding
- ▶ Brazing
- ▶ Heat Treating

YLS-ECO high-power fiber lasers offer the **highest energy efficiencies** with unmatched reliability. Less input power required **dramatically reduces energy costs** without sacrificing output power.

YLS-ECO high-power fiber lasers offer **industry record energy efficiencies over 50%** paired with unmatched reliability and long-term power stability.

YLS-ECO high-power lasers are up to **2X more energy efficient** than the competition. Lower
energy consumption **dramatically reduces operating costs** and chiller demands, making return
on investment faster. YLS-ECO Series unparalleled
reliability is perfectly suited for applications that
cannot tolerate any downtime or service intervention.
YLS-ECO excellent long term power stability ensures
year after year consistent processing quality in all
high power applications including cutting, welding,
brazing, cladding and surface treatment.

# **YLS-ECO SERIES**

# **Highest-Efficiency High-Power Fiber Lasers**

Optical Characteristics	
Wavelength, nm	1074 ±6
Mode of Operation	Continuous Wave/Modulated
Modulation Frequency, kHz	0-5
Max. Average Power, kW	20, 30
Power Tunability, %	10-100
Power Stability, %	±2
Output Fiber Core Diameter, μm	100, 150, 200
Beam Parameter Product, mm × mrad	3.9, 5.5, 6.5

General Characteristics	20 kW	30 kW
Cabinet Dimensions (W × D × H), mm	1007 x 806 x 805	1007 x 808 x 1380
Weight, kg	600	750
Supply Voltage, VAC	400-480 3-phase, 50/60 Hz	
Energy Efficiency, %	5	0

	IPG	Other Fiber Laser
Power Consumption	40 kW	60 kW
Energy Efficiency	50%	33%
Cooling Capacity	20 kW	41 kW
Laser Energy Cost	22,560 USD	34,180 USD
Chiller Energy Cost	6,770 USD	13,740 USD
Total Energy Cost	29,330 USD	47,920 USD

## **IPG 30 kW ECO Energy Savings**

\*Annual Energy Savings \$18,590

3 Year Energy Savings \$37,180

5 year Energy Savings \$55,770

\*Savings example based on energy cost \$0.16/kWh, 75% duty cycle and 16 hour/day operation. Customer savings varies by actual energy cost, duty cycle and hours of operation. Other fibers lasers are typically 25 - 35% energy efficient.



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www.ipgphotonics.com

MAX. AVERAGE OUTPUT POWER: 40,000 W WAVELENGTH RANGE: 900-1200 nm DANGER - INVISIBLE LASER
RADIATION AVOID EYE OR SKIN
EXPOSURE TO DIRECT OR
SCATTERED RADIATION
CLASS 4 LASER PRODUCT

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