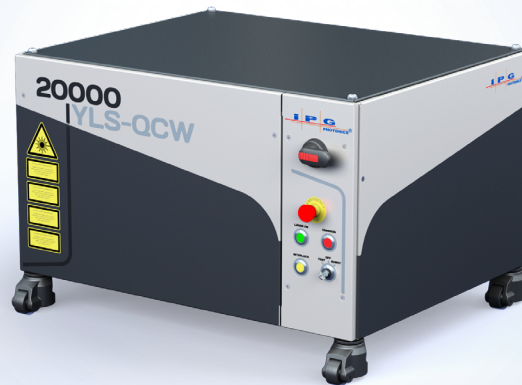




YLS-2000/20000-QCW

High Power Quasi-CW Ytterbium Fiber Laser

NEW PRODUCT



Applications

- ▶ 2D/3D Thin and Thick Cutting
- ▶ Processing Copper, Brass and Aluminum
- ▶ Welding
- ▶ Surface Treatment
- ▶ Drilling



Features

- ▶ CW Output Power 2 kW @ Workpiece
- ▶ Peak Power: 20 kW
- ▶ Pulse Duration: 0.2-10 ms
- ▶ Maintenance-free Operation
- ▶ Modulation up to 2 kHz
- ▶ Cost-effective Cutting System
- ▶ Record Reliability
- ▶ Compact, Rugged Design

IPG Photonics has expanded its QCW fiber laser series with new higher power models, including the **new YLS-2000/20000-QCW** laser. With a peak power of 20 kW, pulse durations of 0.2-10 ms and a maximum pulse energy of 200 J, the newest offering is IPG's QCW product family is well suited to drilling and cutting applications within the aerospace industry, where percussion drilling, trepanning and fine cut features are often required.

Available in compact form factor, with very low price per watt, IPG's QCW fiber lasers are substantially more cost-effective than conventional YAG lasers due to >30% wall-plug efficiency and maintenance-free operation. The QCW lasers are available for requalifying existing lamp-pumped processes.

■ The Power to Transform®

YLS-2000/20000-QCW

High Power Quasi-CW Ytterbium Fiber Laser

Optical Characteristics

Wavelength, nm	1070 ±5
Mode of Operation	Pulsed/CW
Repetition Rate, kHz	2
Average Power*, W	2000
Power Tunability, %	10-100
Peak Power, W	20000
Max. Pulse Energy, J	200
Pulse Duration, ms	0.2-10
Power Stability, %	±2

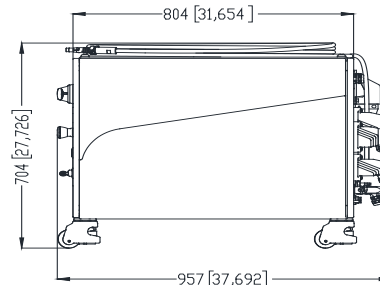
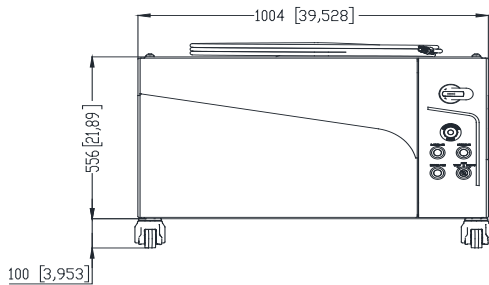
Beam Parameter Product, mm × mrad

15 @ 300 μm feeding fiber
4.2 @ 100 μm feeding fiber

* Higher power levels are available upon request.

General Characteristics

Cabinet Dimensions (W × D × H), mm	1004 x 804 x 556
Weight, kg	380
Cooling	Water-cooled
Supply Voltage, VAC	400-480 3-phase, 50/60 Hz
Power Consumption, kW	<9



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MAX. AVERAGE OUTPUT POWER: 4,000 W
MAX. PEAK OUTPUT POWER: 40 kW
PULSE DURATION: 0.2-10 ms
PULSE REPETITION RATE: 0-2000 Hz
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®