

CFLS-6000

CW Fiber Laser



Features & Benefits

- Unique phosphosilicate gain fiber technology – **photodarkening-free performances** guarantee long-term stability
- High reliability – enables continuous cutting operations
- Excellent beam quality
- Outstanding **back-reflection protection** – safe processing of highly reflective materials
- High modulation rate – ensures fast piercing time for efficient metal processing
- **35% wall-plug efficiency** – reduces the overall electrical power consumption
- Industrial-grade quality – durability in harsh manufacturing environments
- Easy-to-use, Plug & Play design
- Maintenance-free
- Remote diagnostic software for fast support
- Water-cooled chiller also available
- **5-year industry-leading warranty**

Applications

- Laser cutting
- Laser welding

Manufactured under ISO 9001:2015 certified quality system.
All specifications are subject to change without notice. Reference: 100-70-0009.R1

Specifications

Optical

Mode of Operation	CW/Modulated
Polarization	Random
Operating Wavelength (nm)	1075 - 1085
Nominal Output Power (W)	6000
Power Stability (%)	± 1
Output Power Tuning Range (%)	10 - 100
Modulation Frequency (kHz)	0 - 50
Pulse Rise/Fall Time (µs)	15 max.
Output Fiber Core Diameter (µm)	100 (customizable 200)
Beam Quality (BPP) (mm.mrad)	≤ 4.0 (10.0) max.

Electrical

Operating Voltage (VAC)	330 - 430 VAC 3 Phases, 5-Wires
Operating Frequency (Hz)	50 / 60
Power Consumption (W)	18000 max.

Mechanical

Dimensions (W x D x H) (mm)	1532 x 1098 x 1188
Output Fiber Length (m)	20
Output Connector	QBH
Weight (kg)	680

Environmental

Operating Temperature (C°)	10 - 40
Operating Humidity (%)	<70
Ingress Protection	IP65

Cooling

Cooling Method	Water Cooled
Recommended Cooling Capacity (kW)	18.0
Water Flow Rate (L/min)	60 - 70
Water Temperature - Laser (C°)	24.5 - 25.5
Water Temperature - Optics (C°)	27 - 29