



MFE High Power Fibre Amplifier



The MOGLabs MFE is a modular high-power fibre amplifier system based on Er and Yb doped active fibres. It uses an internal or external seed laser and up to three amplification stages providing output power from 500 mW to 20 W. The operating wavelength ranges include 1000 to 1100 nm for Yb and 1530 to 1610 nm for Er active fibres. An external second harmonic generation (SHG) module can be connected directly to the amplifier via a standard USB-C cable.

Currently available wavelengths and peak power:
1060 – 1090nm, 6 W
1550 – 1570nm, 18 W
775 – 785nm, 4.3 W (via SHG)

Features

- Fully modular system
- High output power
- Access to unique wavelengths
- Optional SHG module
- Internal or external seed

Applications

- Telecom test and measurement
- Atomic physics
- Quantum computing

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Specifications MFE

Optical

Wavelengths	1060 – 1090nm, 6 W 1550 – 1570nm, 18 W 775 – 785nm, > 4 W (via SHG)
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Power	500 mW to 20 W (wavelength dependent)
Modulation	10 kHz bandwidth, 0 – 1.2V control input
Power stability	2% RMS
Operating temperature	20 ± 10 °C
Warmup time	30 min

SHG oven

Oven temperature	Ambient to 130 °C
Accuracy	± 0.02 °C
Long-term stability	± 0.05 °C
Regulator type	PID, hysteresis
Interface	USB-C (USB 3.0-3.2) with 60W PD feature
Warmup time	15 min

Communications

Ethernet	10/100 TP, RJ45
USB	USB 2.0, plug type USB-A
Display	2.8" 240x320 TFT

Protection

External interlock	M8 5-pin connector
Key interlock	STANDBY/RUN
Emergency stop	Front panel button
Photodetector	Seed/amplification stage failsafe

Electronics

Indicator	Amplifier ON/OFF (LED), Oven ON/OFF (LED)
Modulation input	BNC 10kHz
Connector	MOGLabs DLC Diode Laser Controller (single cable connect)

Dimensions

Dimensions	422 x 88.5 x 400 (WxHxD), 7kg
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