



MFE High Power Fibre Amplifier System



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:
1040 – 1100nm, up to 20 W
1550 – 1590nm, up to 20 W

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

MFE High Power Fibre Amplifier

Specifications MFE

Optical

Wavelengths 1040 – 1100nm, up to 20 W
1550 – 1590nm, up to 20 W

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

