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MFE High Power Fibre Amplifier System

The Santec 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 nm to 1100 nm for Yb and 1530 nm 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 – 1100 nm, up to 20 W
1550 – 1590 nm, up to 20 W

Features

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

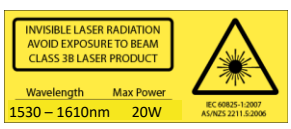
Applications

- Telecom test and measurement
- Atomic physics
- Quantum computing

MFE High Power Fibre Amplifier

Specifications MFE

Optical	
Wavelengths	1040 – 1100 nm, up to 20 W 1550 – 1590 nm, up to 20 W
Power	500 mW to 20 W (wavelength dependent)
Modulation	10 kHz bandwidth, 0 – 1.2 V 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 60 W 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 10 kHz
Connector	Santec DLC Diode Laser Controller (single cable connect)
Dimensions	
Dimensions	422 x 88.5 x 400 mm (WxHxD), 7 kg



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