



MGPA Fibre Amplified Laser



The Santec MGPA is a compact and cost-effective solution providing watts of power from 1010 nm to 1120 nm and 1530 nm to 1610 nm using Yb or Er active fibres. A waveguide doubler option enables tens to hundreds of mW in the frequency doubled wavelength range, 500 nm to 560 nm and 765 nm to 805 nm.

A range of seed laser options are available including internal DFB or Santec CES catenode lasers, or external fibre-coupled lasers. The fibre amplifier can provide up to 4 W (wavelength and seed power dependent).

Remote operation using simple text-based command language via USB or TCP/IP LAN.

Features

- Compact
- Simple integration
- Cost effective
- Access to unique wavelengths
- Internal or external seed

Applications

- Telecom test and measurement
- Atomic physics
- Quantum computing

MGPA Fibre Preamplifier

Specifications MGPA

Optical

Wavelength/power*	1010 – 1120 nm, up to 350 mW (4 mW input) 1530 – 1610 nm, 300 mW (5 mW input)
* Power depends on wavelength	1010 – 1120 nm, up to 4 W (30 mW input) at 1030 nm 1530 – 1610 nm, up to 2 W (25 mW input)
Power gain	8 to 20 dB (wavelength dependent)
Modulation	10 kHz bandwidth, 0 – 1.2 V control input
Stability	2% RMS
Operating temperature	20 ± 10 °C
Warmup time	30 min

Computer interface

Ethernet	10/100 TP, RJ45
USB	USB-B
Display	2.8" TFT colour

Protection

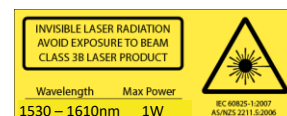
External interlock	M8 3-pin connector
Photodetector	Seed/amplification stage failsafe

Connectors

Modulation input	10 kHz (via M8 connector)
Power	IEC 80 – 264 Vac, 47 – 63 Hz
Seed Fibre Input	FC/APC
Output	Armoured PM fibre, FC/APC standard, end-capped optional

Dimensions

Dimensions	290 x 209 x 89 mm (LxWxH), 1.1 kg
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