

# HIGH Power Fiber Technology

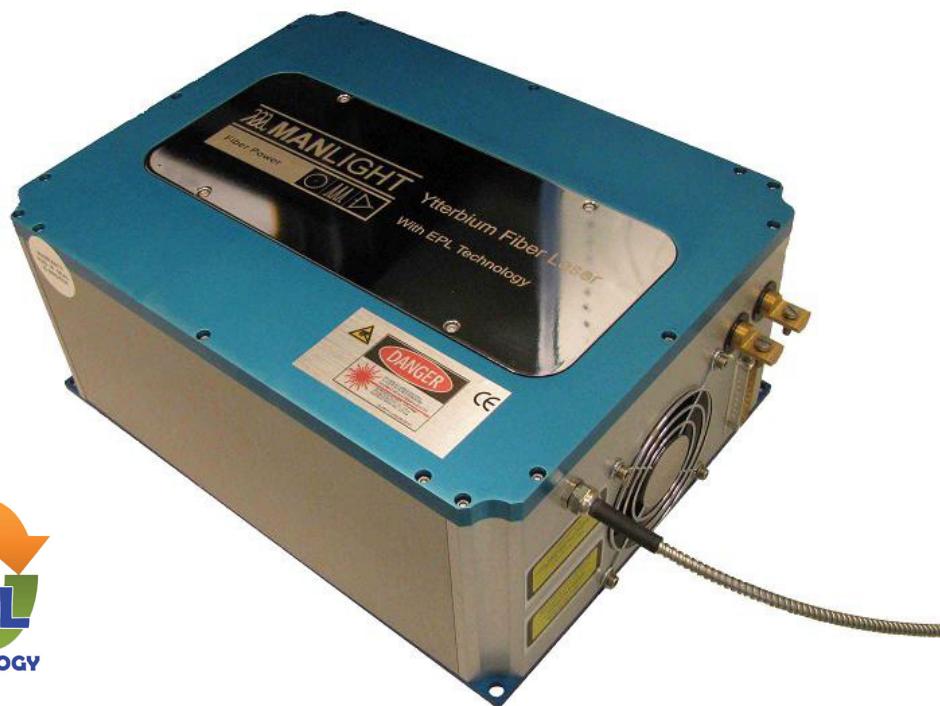
## 1µm Polarized Fiber Laser

### Features:

- Linear polarization
- Up to 20W CW of output power
- Excellent beam quality ( $M^2 < 1.1$ )
- Highly reliable laser diode pumps
- Maintenance free operation
- Compact & rugged design
- Forced air cooled
- Cables included
- Exchangeable Pump technology
- Safety Interlock
- RS232

### Applications:

- Research
- Measurement
- Micromachining



## ML20-CW-P-OEM

The ML20-CW-P-OEM Module is a compact CW Fibre Laser delivering up to 20W of output power, through a near diffraction limited linear polarized beam ( $M^2 < 1.1$ ). The excellent beam quality and power stability make the Manlight Fibre Laser a multi-purpose tool. Our patented "Injection Technology" allows the use of highly reliable broad area laser diode pumps, for a cost-effective and maintenance-free operation. The all-fibre design guarantees the robustness of the laser, without any optical parts to align or to stabilise. Designed under the proprietary „EPL“ technology (Exchangeable Pump Laser), there is no need to send back the ML20-CW-P-OEM to Manlight for maintenance as one can make the swap of the pump diode very easily. Maintenance and lifetime of the product is no more an issue. The simple integration of the system requires no after-installation service. The ML20-CW-P-OEM is the ideal solution for a broad range of industrial applications.

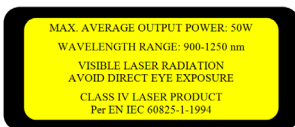
## ML20-CW-P-OEM

### Options:

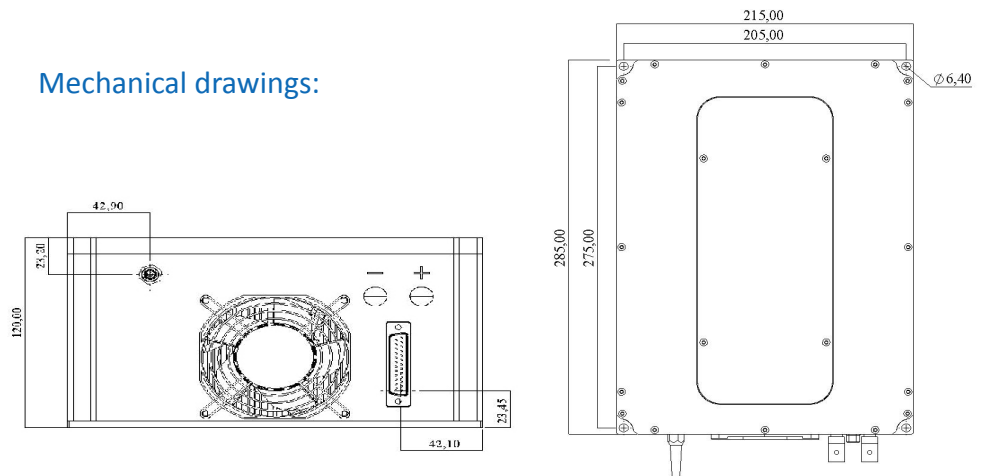
- Variety of fibre lengths
- Different collimating optics
- Back reflection output isolator
- Variety of output terminations
- Customised specs on request
- "REMO" Remote control unit
- Extended warranty
- 12 V power supply
- Rack 19" version

Operating and safety considerations  
 Manlight Fibre Amplifiers comply with CE, FDA & RoHS. All Manlight Fibre Lasers are patent pending.  
 The Manlight Fibre Amplifiers emit both invisible Class IV and visible Class II radiations. Direct and scattered radiation can be harmful to the human eye. Proper laser safety eyewear must be worn during operation. Information in this document is subject to change without notice.

Parameter	Value	Unit
Operation mode	CW - modulated	-
Nominal output power	20	W
Output power tunability	10 – 100	%
Long term stability (RMS, over 1h@20°C)	< +/- 2	%
External TTL modulation frequency	Up to 5.0	kHz
Laser wavelength	1060 – 1100	nm
Emission bandwidth (FWHM)	< 1	nm
Polarization	Linear	-
PER (Polarization Extinction Ratio)	> 15	dB
Laser output configuration	Gaussian profile	-
Output fibre length	3	m
Typical beam diameter @1/e <sup>2</sup>	2.2	mm
Beam quality M <sup>2</sup>	< 1.1	-
Dimensions (heatsink included)	285 x 215 x 120	mm <sup>3</sup>
Weight (heatsink included)	< 10	Kg
Storage / Operation Temperature	- 20 to + 60 / + 15 to + 40	°C
Control interface	RS-232	-
Operating voltage DC	12	V
Typ. power consumption (20W @ 25°C)	< 320	W



### Mechanical drawings:



Ordering Information: ML20-CW-P-OEM  
 Product Code: 115