

ML-CW-R-OEM/TKS ML-CW-P-OEM/TKS Series

Key Features

- Up to 100W CW of output power
- Up to 20W in PM version
- 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
- EPL technology

Applications

- Marking
- Welding
- Cutting
- Printing
- Sintering
- Soldering
- Engraving
- Measurement
- Graphic Imaging

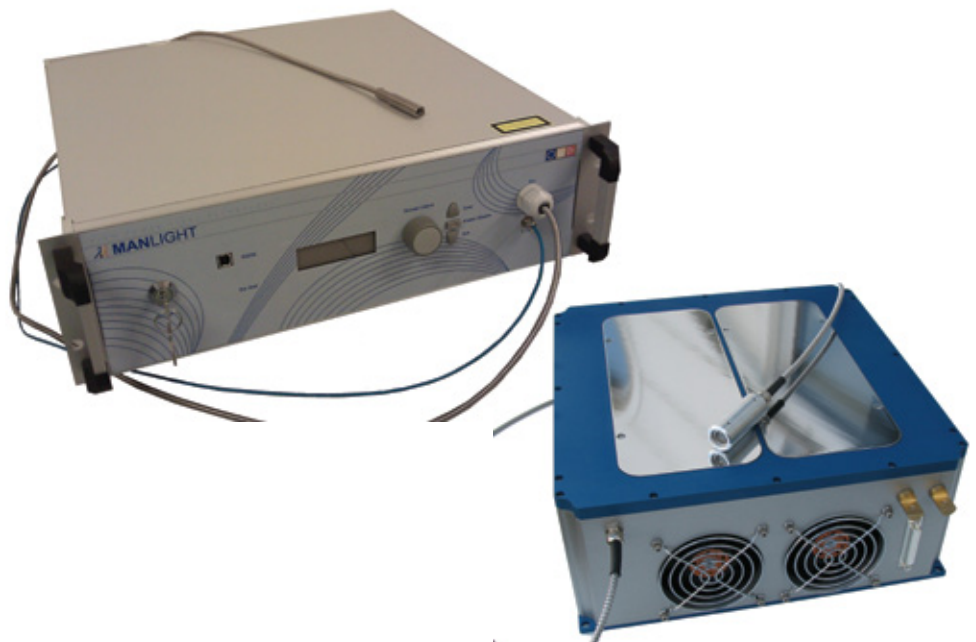
For more info

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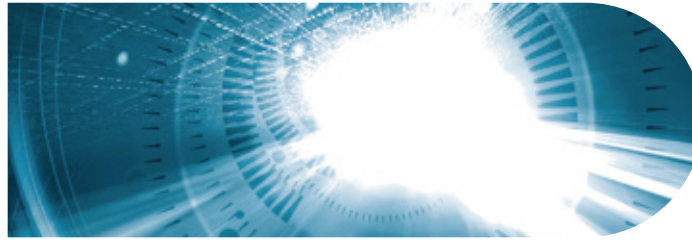
TARV Product Line

1.0 μ m CW High Power Fiber Lasers

The ML-CW-R-OEM/TKS is a compact CW Fibre Laser delivering up to 100W of output power, through a near diffraction limited beam ($M^2 < 1.1$). Designed under the proprietary "EPL" technology (Exchangeable Pump Laser), there is no need to send back the ML-CW-R-OEM/TKS 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 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 stabilize. The simple integration of the system requires no after-installation service. The ML-CW-R-OEM/TKS is the ideal solution for a broad range of industrial and scientific applications. A Polarization Maintaining version is available with output power up to 20W (ML-CW-P-OEM/TKS)



TARV Product Line 1.0µm CW High Power Fiber Lasers



ML-CW-R-TKS ML-CW-P-TKS Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

Parameter	Value	Unit
Operation mode	CW - modulated	-
Nominal output power	1 5 10 20 30 50 100	W
Output power tunability	10 – 100	%
Long term stability (RMS, over 1h@20°C)	<+/- 2	%
External TTL modulation frequency	Up to 10.0	kHz
Laser wavelength	1064 or 1080 1080	nm
Signal linewidth (FWHM)	<1 <3	nm
Polarization Extinction Ratio	>18 >18 >17 >15 >N/A >N/A N/A	dB
Laser output configuration	Gaussian profile	-
Output fibre length	3	m
Typical beam diameter @1/e ²	<2.2 5	mm
Beam quality M ²	< 1.1	-
Dimensions	3U 19" (448 x 451 x 132)	mm ³
Weight	< 13	kg
Storage / Operation Temperature	0 to + 50 / + 15 to + 35	°C
Control interface	Front panel or USB	-
Operating voltage AC	88 to 264	V
Typ. power consumption (@ 25°C)	<500 <180 <150 <320 <350 <1000 <1500	W

Ordering Information:

MLxx-CW-y-TKS

xx = Average output power in Watts

y = R for random, P for polarized

Options:

- Others wavelengths upon request
- Variety of fibre lengths
- Different collimating optics
- Back reflection output isolator
- Control interface options
- Customised specs on request
- Red pilot option
- Extended warranty
- 12V power supply
- Rack 19" version

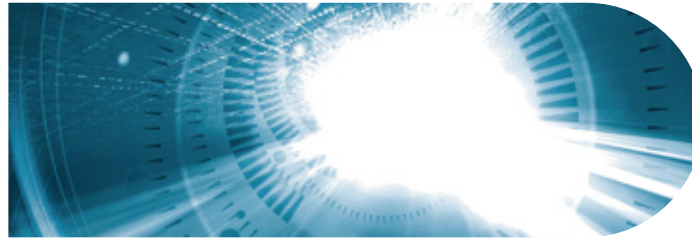
Revised March 2012

Operating and safety considerations 3SPGroup Fibre lasers comply with CE, FDA & RoHS. All 3SPGroup Fibre Lasers are patent pending.

The 3SPGroup Fibre lasers 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.



TARV Product Line 1.0µm CW High Power Fiber Lasers



ML-CW-R-OEM ML-CW-P-OEM Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

Parameter	Value								Unit
Operation mode	CW - modulated								-
Nominal output power	1	5	10	20	30	50	100	W	
Output power tunability	10 – 100								%
Long term stability (RMS, over 1h@20°C)	< +/- 2								%
External TTL modulation frequency	Up to 10.0								kHz
Laser wavelength	1064 or 1080					1080			nm
Signal linewidth (FWHM)	<1				<3				nm
Polarization Extinction Ratio	>18	>18	>17	>15	>N/A	>N/A	N/A	dB	
Laser output configuration	Gaussian profile								-
Output fibre length (typical)	3								m
Typical beam diameter @1/e ²	<2.2			5					mm
Beam quality M ²	< 1.1								-
Dimensions (heatsink included)	230 x 178 x 65			230 x 75x 65			285 x 285 x 150		mm ³
Weight (heatsink included)	<5			<10		<18	<20	kg	
Storage / Operation Temperature	- 20 to + 60 / + 15 to + 40								°C
Control interface	Analog / RS-232								-
Operating voltage DVC	12								V
Typ. power consumption (@ 25°C)	<20	<30	<150	<320	<350	<1000	<1500	W	

Ordering Information:

MLxx-CW-y-TKS

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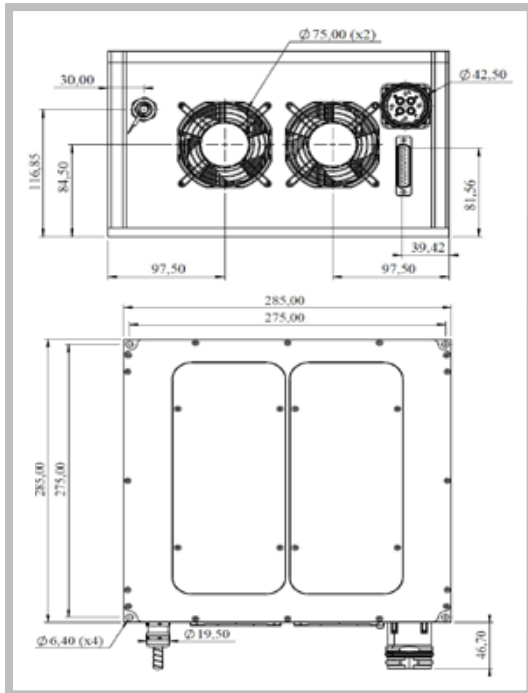
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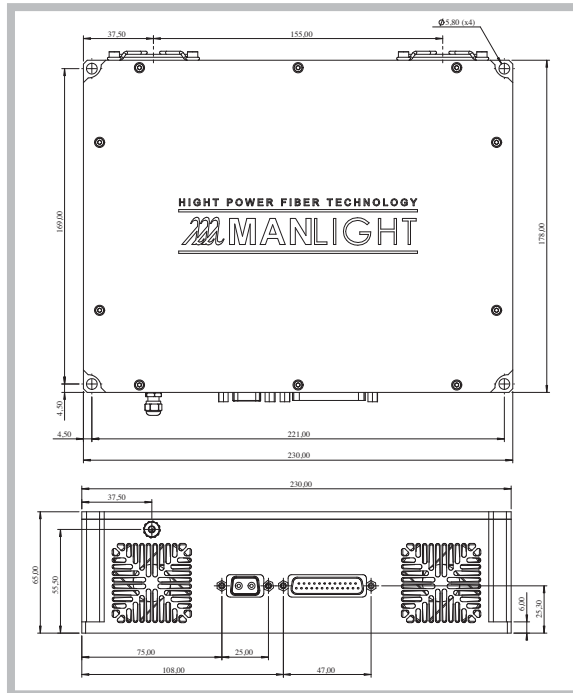
TARV Product Line 1.0µm CW High Power Fiber Lasers



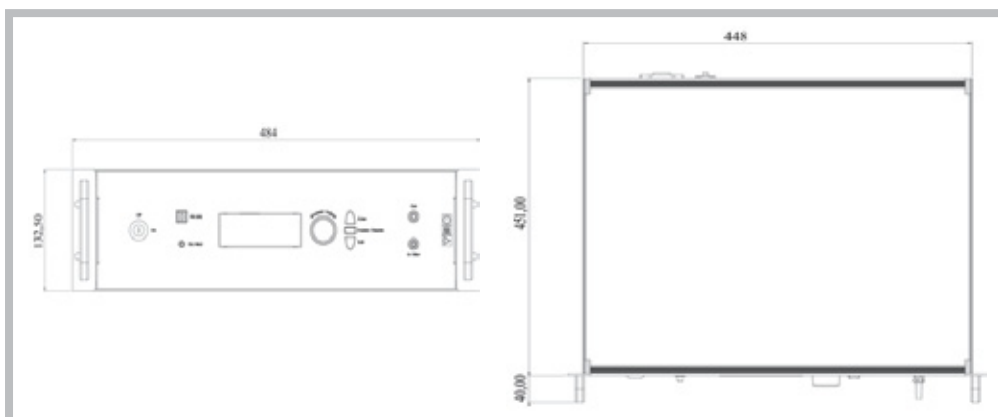
MECHANICAL PACKAGES



OEM 50W and 100W



OEM 1W to 30W



Benchtop units

Please note: information in this document is typical and must be specifically confirmed in writing by your supplier before it becomes applicable to any order or contract. Information is subject to change without notice.
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ORDERING INFO

Please contact your Sales Manager. 3SPGroup can also develop custom products to meet a wide range of technical requirements.



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