



ML-YFA-CW-SLM-P-TKS ML-EYFA-CW-SLM-P-TKS Series

KeyFeatures

- Linear Polarization
- For SLM laser amplification
- Excellent beam quality ($M^2 < 1.1$)
- Up to 20W CW of output power in 1.0 μ m
- Up to 15W CW of output power in 1.5 μ m
- All optical isolated
- Highly reliable laser diode pumps
- Convenient front panel control
- Maintenance free operation
- Compact & rugged design
- Including heat sink & fan
- Cables including
- Safety interlock
- Air cooled
- USB

Applications

- Atom cooling and atom trapping
- Spectroscopy
- Frequency doubling
- Micromachining
- Measurement
- Telecom
- Component testing
- Coherent detection
- Medical
- R&D

For moreInfo

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or via e-mail at sales@3spgroup.com

HED Product Line

1.0 μ m and 1.5 μ m CW SLM PM Fiber Amplifiers

The ML-YFA/EYFA-CW-SLM-P-TKS, “Turn Key System“ is a compact CW Fibre Amplifier delivering up to 20W of output power at 1.0 μ m and 15W at 1.5 μ m, through a near diffraction limited linearly polarized beam ($M^2 < 1.3$).

The ML-YFA/EYFA-CW-SLM-P-TKS is optimised for the amplification of Single Longitudinal Mode (SLM) laser sources of down to 10kHz instantaneous Full Width at Half Maximum (FWHM). The design and configuration of this amplifier render it unique and reliable. The power is delivered through a polarized beam and with excellent power stability. 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 amplifier, without any optical parts to align or to stabilise. The simple integration of the Bench Top system requires no after-installation service.



HED Product Line

1.0µm and 1.5µm CW SLM
PM Fiber Amplifiers



ML-YFA-CW-SLM-P-TKS Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

Parameter	Value						Unit
Operation mode	CW						-
Nominal Seed Laser Wavelength	1064 typ.						nm
Seed Laser Wavelength Range	1060-1090 (others on request)						nm
Seed Laser Instantaneous Linewidth	> 1						kHz
Nominal input power	5						mW
Input power range	5-50						mW
Nominal output power (@ 25mW input)	1	3	5	10	15	20	W
Output power tunability	30 – 100						%
Long term stability (RMS, over 1h@25°C)	< +/- 2						%
Polarization	Linear						-
PER (Polarization Extinction Ratio)	> 15	> 15	> 15	> 15	> 13	> 13	dB
Input fiber type	Panda 980						
Input fiber length	1						m
Input fiber connector	FC/APC						
Output fibre length	typ. 50						cm
Output fiber termination	Collimated Beam						-
Typical beam diameter @1/e ²	<2.2			<1			mm
Optical isolation	Input, inter-stages and output						-
Beam quality M ²	<1.3						-
Dimensions	3U 19" (448 x 451 x 132)						mm ³
Weight	< 13						kg
Storage / Operation Temperature	0 to + 50 / + 15 to + 35						°C
Control mode	ACC						-
Control interface	Front panel or USB						V
Operating voltage AC	88 to 264						V
Typ. power consumption (@ 25°C)	<150	<150	<250	<320	<350	<480	W

Ordering Information:
MLxx-YFA-CW-SLM-P-TKS
xx = Average output
power in Watts

Options:
- 10x beam expander
- Customised specs on request
- Extended warranty.

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

The 3SPGroup 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.



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Mechanical drawings:



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1.0µm and 1.5µm CW SLM
PM Fiber Amplifiers



ML-EYFA-CW-SLM-P-TKS Series

SPECIFICATIONS* STANDARD CONFIGURATIONS

Parameter	Value					Unit
Operation mode	CW					-
Nominal Seed Laser Wavelength	1550 typ.					nm
Seed Laser Wavelength Range	1540-1560 (others on request)					nm
Seed Laser Instantaneous Linewidth	> 1					kHz
Nominal input power	5					mW
Input power range	5-25					mW
Nominal output power (@ 25mW input)	1	3	5	10	15	W
Output power tunability	30 – 100					%
Long term stability (RMS, over 1h@25°C)	<+/- 2					%
Polarization	Linear					-
PER (Polarization Extinction Ratio)	> 15	> 15	> 15	> 15	> 13	dB
Input fiber type	Panda 1550					
Input fiber length	1					m
Input fiber connector	FC/APC					
Output fibre length	typ. 50					cm
Output fiber termination	Collimated Beam					-
Typical beam diameter @1/e ²	<2.4		5			mm
Optical isolation	Input, inter-stages and output					-
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 mode	ACC					-
Control interface	Front panel or USB					V
Operating voltage AC	88 to 264					V
Typ. power consumption (@ 25°C)	<150	<150	<250	<320	<450	W

Ordering Information:

MLxx-EYFA-CW-SLM-P-TKS

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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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