

1.5um High Power Pulsed Fiber Amplifier



Product Description:

The MARS series 1.5um high power pulsed fiber amplifiers of Connet are eye-safe amplifiers. The optical path structure is optimized according to the short pulse signal amplification to efficiently suppress the generation of ASE. This series of amplifiers employ the high-power, high-performance multi-mode pump lasers inside. The proprietary technology and the peculiar devices guarantee the maximum optical-optical conversion efficiency and the minimum nonlinear effects during the process of amplification.

The unique thermal treatment technology guarantees that the amplifiers can be operated stably for a long time. The high-speed response protection circuit monitors the power of the input and the output signals automatically to ensure the safety of the whole system.

The MARS series high power pulsed fiber amplifiers include the single-mode and the polarization-maintaining outputs. Different types of packages are available for option such as benchtop, rack-mount and module. This series of amplifiers can be widely used in the areas of optical fiber communication, coherent combination and sensing, etc.

Applications:

- Optical fiber communication
- Free space communication
- Atmosphere monitoring
- Environment monitoring
- Research & Development

Features:

- High output peak power: up to 30kW
- Short pulse amplification: 10ns/1MHz
- High stability, high reliability
- High optical-to-optical efficiency
- Output power tunable
- Customized versions available



Specifications:

Parameter	Unit	Specification		
		Min	Typ.	Max
Part no.		MFAS-EY-C-PL: SM		MFAP-EY-C-PL: PM
Wavelength range	nm	1530	1550	1561
Average power	W	-	-	5
Peak power	kW	-	-	30
Pulse width	ns	1	-	250
Repetition rate	kHz	1	-	1000
Operation mode		Pulse		
Output power tunable range	%	10	-	100
Polarization		Random or Linear Polarization		
Polarization Extinction Ratio (PER)	dB	17	20	-
Output power stability (8hrs) ¹	%	-	±1	±2
Beam quality	M ²	<1.2		
Input isolation	dB	30	-	-
Output isolation	dB	30	-	-
Output fiber type (SM)		SM or LMA fiber		
Output fiber type (PM)		PM Fiber		
Length of the output fiber	m	>1		
Optical connector		FC/APC (other options available)		
Power supply	V _{AC}	100-240		
Power consumption	W	-	-	150
Operating temperature	°C	0	-	+30
Storage temperature	°C	-40	-	+85
Cooling mode		Air-cooling		
Dimension		19" 2U or 19" 3U		

Specifications:

· The output power stability is measured under 25°C after 30 minutes' warm-up.

Ordering Information:

- MFAS-EY-C-<P>-PL: SM
- MFAP-EY-C-<P>-PL: PM
- C: Operating wavelength in nm, Example: 1550nm
- P: Package: B-Benchtop, R-Rack-mount, M-Module