

1550 nm Benchtop Erbium-doped Fiber Amplifier



Applications

- Seed laser amplification
- C-band channel pre- or boost amplification
- Narrow band amplification in access or CATV networks
- DWDM metro network
- Core network
- Short pulse amplification

Features

- Saturated output power up to 37 dBm
- Input power range from -25 to 10 bBm
- Wavelength range 1530 to 1565 nm
- Low noise figure
- Convenient fiber pigtail connections
- Exceptional long term stability
- Turnkey benchtop platform with RS232 interface

The Coronado benchtop amplifier (AMP) is a compact optical amplifier based upon erbium-doped fiber that provides broadband gain over the C-band (1530 to 1565 nm). The system features a portable design and a user-friendly front panel control interface for adjustment of the amplifier gain. It has been optimized for amplification of short optical pulses (such as those provided from Calmar's Mendocino series) and offers high gain and low noise with long term dependable performance. Convenient pigtail fiber connections provide either polarization-maintaining (PM) or non-PM options. The former ensures the amplified output is linearly polarized and eliminates unwanted polarization effects. The system offers saturated output power levels up to 37 dBm and a noise figure as low as 6 dB.

If the performance parameters do not quite fit your application requirements or you have interest in an L-band module, please contact us at sales@calmarlaser.com to discuss a customized solution.

Technical Specifications¹

Model Number	AMP-PM18	AMP-PM23	AMP-PM30	AMP-PM37
OPTICAL (Polarization Maintaining EDFA Module)				
Center Wavelength ² (nm)	1530 ~ 1565			
Output Power ³ (dBm)	18	23	30	37
Small Signal Gain	30	35	35	35
Input Power Range (dBm)	-25 ~ +10		0 ~ 3	
Noise Figure (dB)	< 5.0	< 5.5	< 6.5	< 6.5
Polarization Extinction Ratio (dB)	> 20		> 17	
Input/Output/Termination	PM 1550 fiber pigtail with FC/APC connector			
Model Number	AMP-ST18	AMP-ST23	AMP-ST30	AMP-ST37
OPTICAL (Non-Polarization Maintaining EDFA Module)				
Center Wavelength ² (nm)	1530 ~ 1565			
Output Power ³ (dBm)	18	23	30	37
Small Signal Gain	30	35	35	35
Input Power Range (dBm)	-25 ~ +10		0 ~ 3	
Noise Figure (dB)	< 5.5	< 6.0	< 6.5	< 6.5
Polarization State	Arbitrary			
Input/Output/Termination	Fiber pigtail with FC/APC connector			
ELECTRICAL				
Supply Voltage (VAC)	85 - 264 autoranging			
Supply Frequency (Hz)	47 - 63 autoranging			
Communication Interface	9 pin D-sub connector/RS232			
MECHANICAL				
Operating Temperature (°C)	0 - 50			
Dimension (cm)	34.9(W) x 43.7(D) x 10(H)		48.2(W) x 46.7(D) x 10(H)	
Weight (kg)	~ 6		~ 8	
Warm-up Time (min)	< 10			

1. Due to our continuous improvement philosophy, all product specifications are subject to change without prior notice. Please contact sales@calmarlaser.com for customized specifications.

2. For other wavelengths, such as the L-band, please contact sales@calmarlaser.com

3. For other output powers, please contact sales@calmarlaser.com.

