

Erbium Doped Fiber Amplifier PA/BA/High-power for L-Band



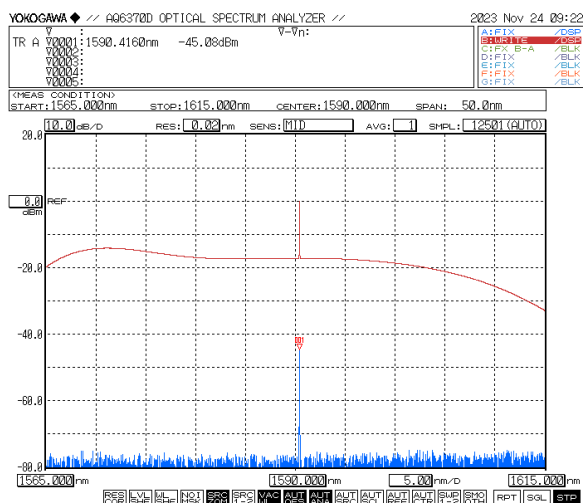
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Erbium-doped Fiber Pre-Amplifier for L-band

SIMTRUM's L-Band Erbium-Doped Fiber Small Signal Amplifier (PA Amplifier) is designed to amplify weak optical signals in the -45dBm to -25dBm range. It offers a typical small signal gain of up to 45 dB with a low noise figure, enhancing the detection capabilities of photodetectors for weak light signals.



L-band amplified output spectrum (1590nm)



Features

- Broad wavelength range
- High gain coefficient
- Low noise

Application

- Optical fiber communication
- Fiber optic sensing
- Fiber laser

Specifications

Optical Parameters	Unit	Typical Value		Remarks
Operating Wavelength	nm	1570 ~ 1603		L-band
Input Signal Power	dBm	-45~-25		
Gain Factor	dB	45@-45dBm input		
Noise Figure	dB	≤4.5		
Polarization Extinction Ratio	dB	-	≥23	
Polarization Dependent Gain	dB	≤0.3		
Polarization Mode Dispersion	ps	≤0.5		
Input/output Isolation	dB	>35		
Optical Power Monitoring	-	Output power		
Optical Fiber & Connectors	-	SMF-28	PM1550	FC/APC
Control Mode	-	ACC		

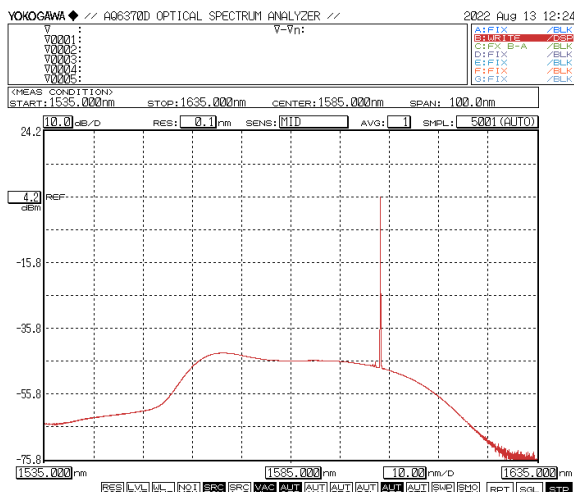
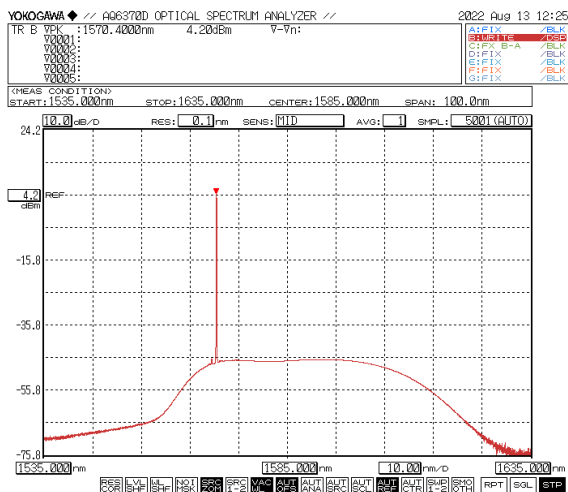
Specifications

General Parameters	Benchtop	Module
Control Function	Keystroke/ RS232 serial communication	RS232 serial communication
Remote Control Port	DB9 Female	DB9 Female
Power Supply	AC100~240V, <30W	DC5V, <15W
Dimensions	260(W)×280(D)×120(H)mm	125(W)×150(D)×20(H)mm
Operation Temperature	-5~+35°C	
Operation Humidity	0~70%	

Ordering Information/ Product Code					
Series	Wavelength(nm)	Amplifier Type	Small Signal Gain (dB)	Fiber	Packaging
STEDFA	L = L-band	PA = Pre amplifier	45 = 45dB@-45dBm	SM = Single mode fiber	M - Module
				PM = PM1550	B - Desktop

Erbium-doped Fiber Booster Amplifier for L-band

SIMTRUM's L-Band Erbium-Doped Fiber Booster Amplifier(BA) is tailored for fiber laser and communication systems, covering wavelengths from 1570 to 1603 nm. It features high gain and low noise, making it ideal for enhancing optical power in these applications.



L-band amplified output spectrum (1590nm & 1603nm, 23dBm power)

Features

- Covering L band
- High gain factor
- High output power

Application

- Optical fiber communication
- Fiber optic sensing
- Fiber laser



Specifications

Optical Parameters	Unit	Typical Value		Remarks
Operating Wavelength	nm	1570 ~ 1603		L-band
Input Signal Power	dBm	-6~+3		
Saturation Output Power	dB	15/17/20/23/25/26		@-3dBm input
Noise Figure	dB	5		@-3dBm input
Polarization Extinction Ratio	dB	-	≥23	
Polarization Dependent Gain	dB	≤0.3		
Polarization Mode Dispersion	ps	0.5		
Input/output Isolation	dB	>35		
Optical Power Monitoring	-	Output power		
Optical Fiber & Connectors	-	SMF-28	PM1550	
Fiber Connectors	-	FC/APC		

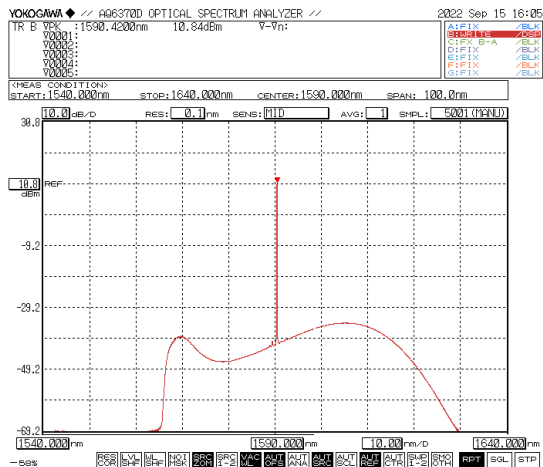
Specifications

General Parameters	Benchtop	Module
Control Function	Keystroke/ RS232 serial communication	RS232 serial communication
Remote Control Port	DB9 Female	DB9 Female
Power Supply	AC100~240V, <30W	DC5V, <15W
Dimensions	260(W)×280(D)×120(H)mm	125(W)×150(D)×20(H)mm
Operation Temperature	-5~+35°C	
Operation Humidity	0~70%	

Ordering Information/ Product Code					
Series	Wavelength(nm)	Amplifier Type	Saturation Output Power (dBm)	Fiber	Packaging
STEDFA	L = L-band	BA = Booster Amplifier	15/17/20/23/25/26	SM = Single mode fiber	M - Module
				PM = PM1550	B - Desktop

High Power Erbium-doped Fiber Amplifier for L-band

SIMTRUM's L-Band High-Power Erbium-Doped Fiber Amplifier utilizes efficient single-mode fiber amplification and advanced heat dissipation techniques to deliver high-power laser output in the 1570-1605nm range. With its high power and low noise characteristics, this amplifier is ideal for fiber communication systems, fiber sensing, and LIDAR applications.



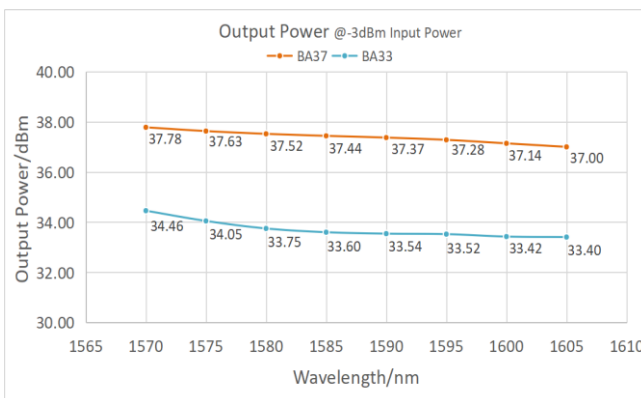
L-band amplified output spectrum (1590nm, 10W power)

Features

- Low noise
- High gain factor
- High output power

Application

- Optical fiber communication
- Fiber optic sensing
- Lidar



Specifications

Optical Parameters	Unit	Typical Value	Remarks
Operating Wavelength	nm	1570 ~ 1605	
Input Signal Power	dBm	-6 ~ +10	
Saturation Output Power	dBm	27/30/33/35/37/40	@-3dBm input
Output Power Adjustable	-	10% ~ 100%	
Noise Figure	dB	<6.0	@-3dBm input
Polarization Dependent Gain	dB	≤0.5	
Polarization Mode Dispersion	ps	0.5	
Input/output Isolation	dB	>35	
Optical Power Monitoring	-	Input Power, Output Power	
Fiber connectors	-	SMF-28, FC/APC	For power test only
Control mode		ACC/APC	

Specifications

General Parameters		Benchtop	Module
Control Function		Keystroke/ RS232 serial communication	RS232 serial communication
Remote Control Port		DB9 Female	DB9 Female
Power Supply		AC100~240V, <150W	DC5V, <60W
Dimensions	Power 27/30 dBm	260(W)×320(D)×120(H)mm	125(W)×150(D)×31.5(H)mm
	Power 33/35/37/40 dBm	360(W)×350(D)×120(H)mm	139(W)×235(D)×70(H)mm
Operation Temperature		-5~+35°C	
Operation Humidity		0~70%	

Ordering Information/ Product Code

Series	Wavelength(nm)	Amplifier Type	Output Power (dBm)	Fiber	Packaging
STEYDFA	L = L-band	HP-BA = High Power BA Amplifier	27/30/33/35/37/40	SM = SMF-28	M - Module
					B - Desktop