

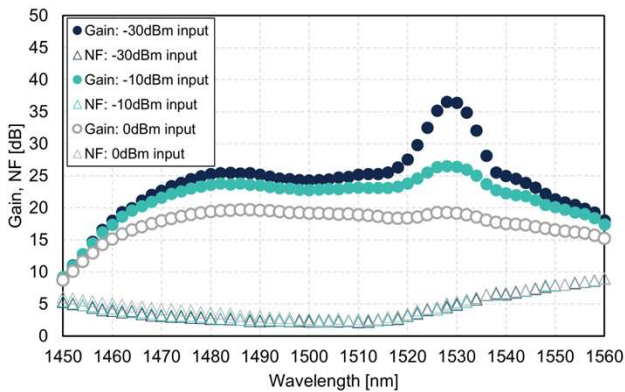


# AMP-FL8222-SB-18-PM

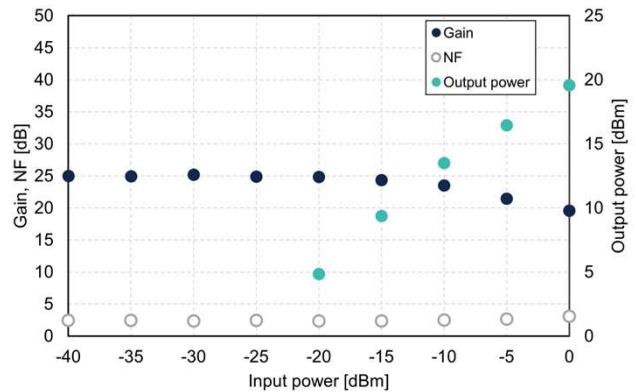
- S-band Optical Fiber Amplifier -



## Typical Performance



Gain/noise figure vs. wavelength



Gain/NF/output power vs. input power @ 1490nm

## Features

- ❑ Wide working wavelength range covered from S-band to C-band
- ❑ Gain flatness between 1470nm and 1510nm is very small
- ❑ Performance is similar to our non-PM S-band fiber amplifier AMP-FL8221-SB-19-W
- ❑ High output power ( $\geq 18\text{dBm}$ ) and high extinction ratio ( $> 20\text{dB}$ )
- ❑ Low noise figure ( $\leq 7\text{dB}$ )
- ❑ High stability
- ❑ High reliability

## Applications

- ❑ Ultra-wideband optical communication
  - e.g. amplifying input power of phase modulator and local oscillator's power at coherent receiver
- ❑ Sensing
- ❑ Spectroscopy
- ❑ R&D

**Product Number: AMP-FL8222-SB-18-PM**

**TECHNICAL SPECIFICATIONS**

Optical Specifications	unit	min.	typ.	max.	note
Signal Wavelength	nm	1470	1490	1520	-
Signal Input Power	dBm	-40	-	10	Signal input power monitor
Signal Output Level	dBm	18	19	-	Pin: 0dBm @λ typ.
Signal Gain	dBm	20	24	-	Pin: -30dBm @λ typ.
Noise Figure	dB	-	3	7	Pin: -30dBm @λ typ.
Working Axis	-	Slow axis (Fast axis blocked)		-	-
Polarization Extinction Ratio	dB	20	-	-	-
Input/Output Isolation	dB	40/40	-	-	Internal isolator included
Laser Class	-	3B		-	-
Standard Optical Connector	-	FC/PC		-	Narrow key, Slow axis to key
Input/Output Fiber	-	Corning PM1550		-	-

Functional Specifications		note
Operating Mode	- Auto Current Control - Auto Light Control	-
Monitoring Parameters	- Input signal power - Output signal power - Back-reflection from outout port - Pump LD current - Pump LD temperature - Case temperature	- - Opt.093 - - -
Remote Control	- RS-232C - IEEE488.1(GP-IB)	- -
Safety Function	- Key lock switch - Remote interlock - Pump shutdown with input alarm - Power reduction with back reflection alarm	- - - Opt.093

Electric Specifications	unit	min.	typ.	max.	note
Power Consumption	W	-	25	45	-
Insulation Resistance	MΩm	10	-	-	DC500kV, b/w PS-Case
Withstand Voltage	kV	1.5	-	-	AC, 2seconds, b/w PS-Case
Power-Supply Voltage	V	90	-	240	AC
Fluctuation Tolerance	%	-	-	10	-
Power-Supply Frequency	Hz	50	-	60	-
Fluctuation Tolerance	%	-	-	10	-

Mechanical Specifications	unit	min.	typ.	max.	info.
Weight	kg	-	-	7	-
Dimension	mm	88 x 430 x 350		-	HxWxD, without protrusions, 2U compatible

Environmental Specifications	unit	min.	typ.	max.	info.
Operating Temperature	° C	0	-	40	-
Storage Temperature	° C	-10	-	60	-
Operating Humidity	%rh	0	-	90	Non-condensing
Operating Condition	-	Indoor Use		-	-

**Other/Special Specifications**  
None in particular

Option	
opt.011	N/A
opt.012	FC/Angled-PC
opt.013	SC/PC
opt.014	SC/Angled-PC
opt.072	N/A
opt.091	N/A
opt.093	Back reflection monitor, alarm & Interlock
opt.121	N/A
opt.123	Rackmount brackets (Size: 88(H)×430(W)×350(D) mm)

Standard Accessory	
Power cable	: 1
Power key	: 2
Manuals	: PDF
Specification sheet	: PDF
Inspection record	: Hard copy

※ All functions, specifications and appearance are subject to change without notice.



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**Revision Information**

Unique : 1.1.1  
 Common : 1.1.1  
 Format : 1.3.2

