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RAYCORE

Q3-S324 V1.3E

Specification of 1RU 1550nm EDFA,
1, 2, 4, 8 ports Fiber Port in Front
Panel, Power Supply in Rear Panel

Part Number: AFAM-xx1x-1xxxx-xx

AFAM-xx1x-1xxxx-xx series is a CATV optical amplifier with gain spectrum band within 1540~1565nm. This kind of optical amplifier is designed for the application of single channel or 1~8 continuous ribbon channels (ITU wavelength). Generally, fiber CATV system operates in single wavelength that has no strict requirement on gain flatness. AFAM-xx1x-1xxxx-xx amplifier is featured with low NF, high-saturated output power. It is applicable for central bureau, sub-bureau and line relay, as well as other optical communication network. AFAM-xx1x-1xxxx-xx is applied most commonly and widely compared with other optical amplifier in CATV system.

AFAM-xx1x-1xxxx-xx optical amplifier adopts the world's top class pump laser and America OFS erbium-doped optical fiber. Perfect APC, ACC and ATC control, excellent design in the ventilation and heat-dissipation ensure the long life and high reliable work of pump laser. RS232 and RJ45 offer serial commutation and SNMP network management port. The LCD at the front panel offers the work index of all equipment and warning alarm. The laser will switch off automatically if optical power is missing, which offers security protection for the laser. All the optical port of optical amplifier can be installed in the front panel.

AFAM-xx1x-1xxxx-xx optional two-way optical input (built-in 2x1 optical switch), can be used for self-healing ring network or redundant backup network.

Features

- 1540~1563nm operating bandwidth
- Low noise, high output, high reliability
- APC、ACC、ATC controlled selection
- Powerful RS232 supervisory instruction
- Optional dual optical input, built-in 2 × 1 optical switch
- Dual power supply optional, 1+1 backup

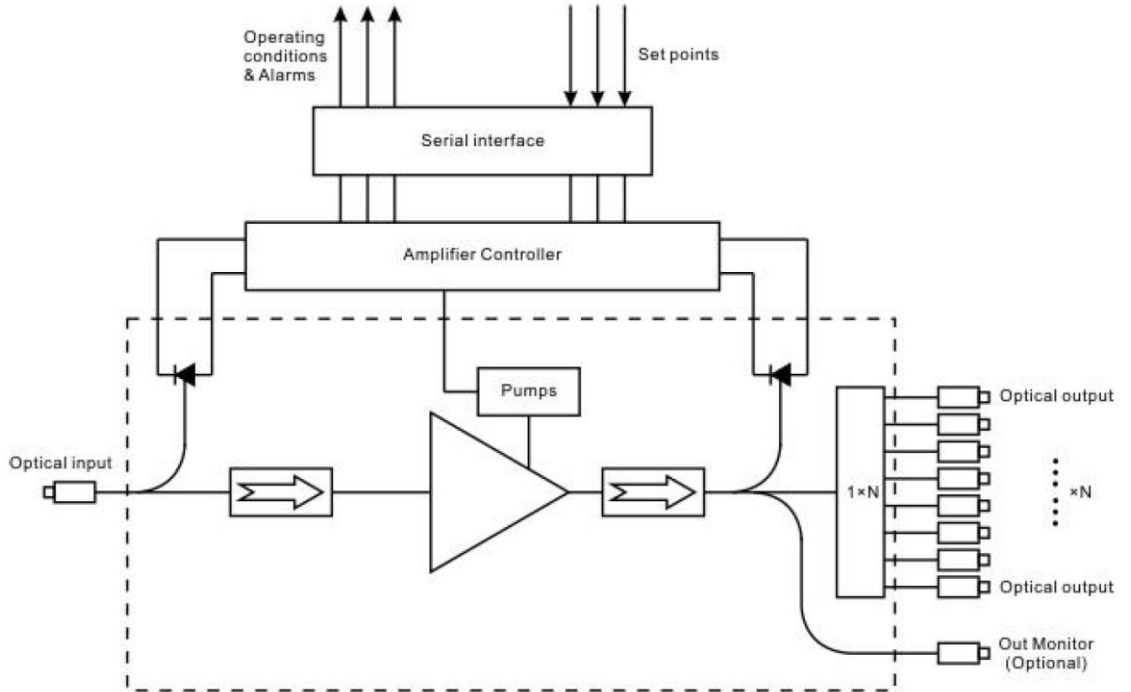
Application

- AM CATV
- Digital CATV
- DBS & MMDS
- FTTP
- FTTx PON
- Laboratory application

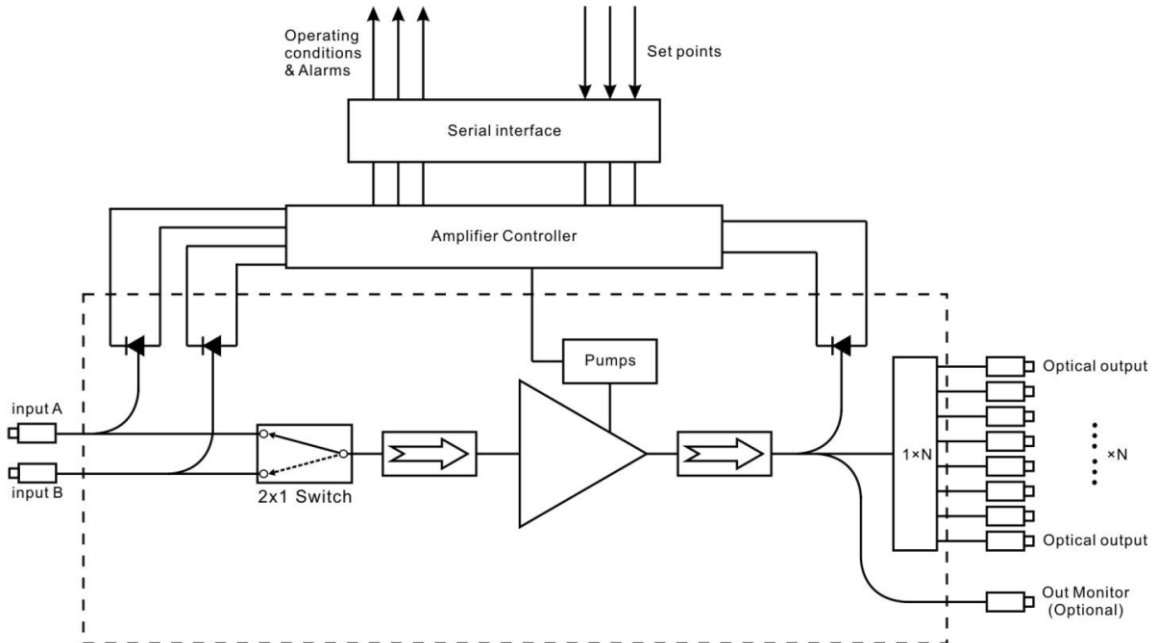


Block Diagrams

AFAM-Ax1x-1xxxx-xx (conventional)



AFAM-Bx1x-1xxxx-xx (Built-in Optical Switch)



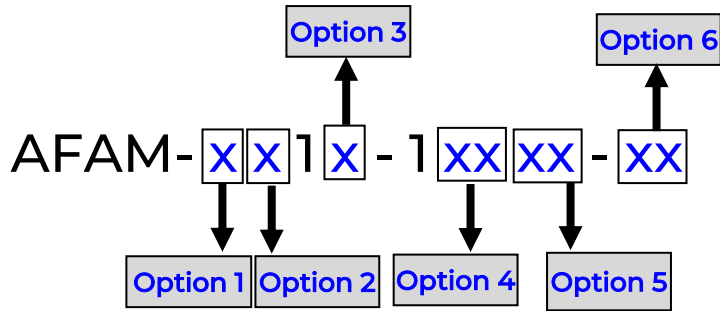
Specifications

Performance		Index			Supplement
		Min.	Typ.	Max.	
Optical feature					
Operating wavelength range	(nm)	1540		1563	CATV
Input power	(dBm)	-10		+10	*Typical: 0 ~ +10dBm for output power
Number of output ports	(pcs)	1		8	(Optional)
Each output power	(dBm)			25	(Optional)
Difference of output power	(dB)	-0.5		+0.5	
Output optical power monitoring	(dB)		-20		(Optional)
Noise figure (Pin=0dBm)	(dB)			6.3	
Switch time	(ms)			8.0	AFAM-Bx1x-1xxxx-xx
Polarization dependence loss	(dB)			0.3	
Polarization dependence gain	(dB)			0.3	
Polarization mode dispersion	(ps)			0.3	
Input/output isolation	(dB)	30			
Pump power leakage	(dBm)			-30	
Echo loss	(dB)	55			APC
Optical Connector		SC/APC or LC/APC			(Optional)
General feature					
Network management interface		RJ45			SNMP
Series interface		RS232			
Power supply	(V)	90		265	220VAC (Optional)
		30		72	-48VDC (Optional)
Power consume	(W)			50	
Operating temp.	(°C)	-5		50	
Storage temp.	(°C)	-40		80	
Operating relative humidity	(%)	5		95	
Size (W)×(D)×(H)	(mm)	483 × 368 × 44			1RU (19")



Ordering Information

Part Number	Description
AFAM-xx1x-1xxxx-xx	1RU 1550nm EDFA, 1, 2, 4, 8 ports Fiber Port in Front Panel, Power Supply in Rear Panel



Option 1: Input Ports

Option Code	Option Descriptions
A	1 Port (without optical Switch)
B	2 Ports (with optical Switch)

Option 2: Optical Output Power Monitoring Port

Option Code	Option Descriptions
A	without Optical Power Monitoring Port
B	with Optical Power Monitoring Port

Option 3: Optical Connector

Option Code	Option Descriptions
S	SC/APC
L	LC/APC



Option 4, 5: Optical Power & Number of Output Ports

Part Number	Number of Output Ports	Output Power (dBm) / Per Port
AFAM-xx1x-1 15 01 -xx	1	15
AFAM-xx1x-1 16 01 -xx	1	16
AFAM-xx1x-1 17 01 -xx	1	17
AFAM-xx1x-1 18 01 -xx	1	18
AFAM-xx1x-1 19 01 -xx	1	19
AFAM-xx1x-1 20 01 -xx	1	20
AFAM-xx1x-1 21 01 -xx	1	21
AFAM-xx1x-1 22 01 -xx	1	22
AFAM-xx1x-1 23 01 -xx	1	23
AFAM-xx1x-1 24 01 -xx	1	24
AFAM-xx1x-1 25 01 -xx	1	25
AFAM-xx1x-1 15 02 -xx	2	15
AFAM-xx1x-1 16 02 -xx	2	16
AFAM-xx1x-1 17 02 -xx	2	17
AFAM-xx1x-1 18 02 -xx	2	18
AFAM-xx1x-1 19 02 -xx	2	19
AFAM-xx1x-1 20 02 -xx	2	20
AFAM-xx1x-1 21 02 -xx	2	21
AFAM-xx1x-1 22 02 -xx	2	22
AFAM-xx1x-1 15 04 -xx	4	15
AFAM-xx1x-1 16 04 -xx	4	16
AFAM-xx1x-1 17 04 -xx	4	17
AFAM-xx1x-1 18 04 -xx	4	18
AFAM-xx1x-1 15 08 -xx	8	15
AFAM-xx1x-1 16 08 -xx	8	16

Option 6: Power Supply

Option Code	Option Descriptions
00	Only 1 AC Power
02	Only 1 DC Power
08	AC Power + AC Power
09	DC Power + DC Power
10	AC Power + DC Power

