

SA5400A, SA5400B

High-power Multi-ports output CATV EDFA (1540~1563nm)



Product description

SA5400 series is a high-power multi-ports EDFA with gain spectrum band within 1540~1563nm. It is designed for the application of single channel or 1~8 continuous ribbon channels (ITU wavelength). This series of EDFA offers a flexible and low-cost solution for CATV large area coverage of metropolises and medium-sized cities.

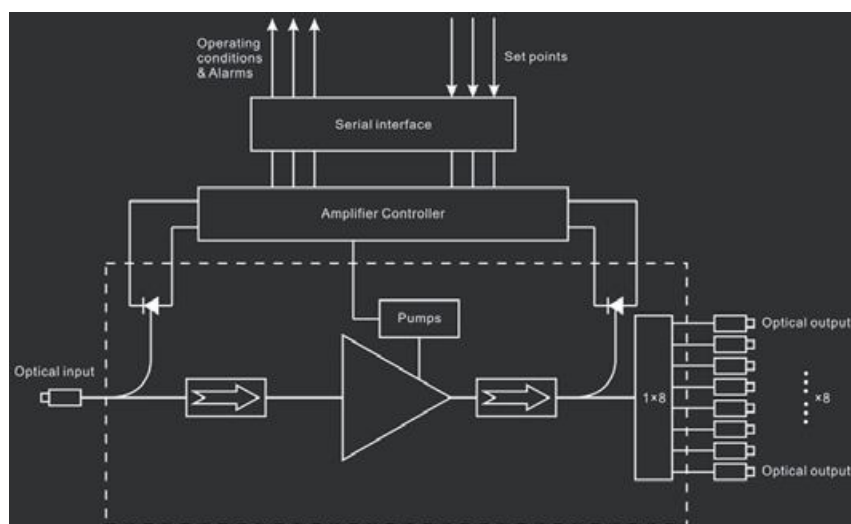
Huatai is the famous manufacturer of EDFA. SA5400 EDFA adopts the world's top class pump laser and America OFS erbium-doped optical fiber. Perfect APC, ACC and ATC control, excellent design in the ventilation and heat-dissipation ensure the long life and high reliable work of pump laser. RS232 and RJ45 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 EDFA can be installed in the front panel (also can be in the back panel if customers specify).

Our EDFA product, for its high quality, high reliable and high cost performance, is the ideal choice of the system integration and system operation.

SA5400A EDFA: 1RU chassis, total output power >1000mW, offers 16 optical outputs at most.
SA5400B EDFA: 2RU chassis, total output power >5000mW, offers 64 optical outputs at most.

Opto-electrical diagram

Optical port mode 08 (8 ways optical output)



Product features

- 1540~1563nm operating bandwidth for SA5400 EDFA
- 500~5000mW (27~37dBm) high output power
- 8~64 outputs is optional
- Low noise subnumber (Typ $\leq 4.5\text{dB}$, Max $\leq 5.0\text{dB}$, Output $\geq 37\text{dBm}$)
- High performance, high reliability
- APC, ACC, ATC controlled selection (SA5400/P)
- Powerful RS232 supervisory instruction
- Efficient space, flexible installation and easy operation
- Excellent P/P ratio

Main application

- AM CATV
- Digital CATV
- DBS & MMDS
- FTTx PON

Model explanation

SA-54[Saturation output power][Exterior]-
[Number of optical port]-[Connector]-[Power supply]

Product series	SA	Amplifier of communication class
Operating bandwidth	5	1540~1563 nm CATV
	4	C-Band 1528~1565 nm
	6	L-Band 1570~1610 nm
	7	C+L-Band
	8	Bi-direction EDFA
Product type	1	BA
	2	LA
	3	PA
	4	High Power
	5	VGA
	7	MSA
	8	FTTP with CWDM for FTTx PON
	Saturation output power	27
28		28 dBm
29		29 dBm
30		30 dBm
31		31 dBm
32		32 dBm
33		33 dBm
34		34 dBm
35		35 dBm
36		36 dBm
Exterior	A	19" 1 RU
	B	19" 2 RU
Number of optical port	02	2 ports
	04	4 ports
	08	8 ports
	16	16 ports
Connector	FA	FC/APC
	FP	FC/UPC
	SA	SC/APC
	SP	SC/UPC
	LA	LC/APC
	LP	LC/UPC
Power supply	22	220VAC
	11	110VAC
	48	-48VDC

Technical index

Performance		Index			Supplement		
		Min	Typ	Max			
Optic feature	Operation Wavelength range(λ)	(nm)	1540		1563	CATV	
	Input power	(dBm)	-10	$\geq +3$	+10		
	Total output power1)	(dBm)		27		32	1U
				28		37	2U
	Number of output port			4		16	S1U, SC/APC, LC/APC
				8		32	1U, LC/APC
				8		32	2U, SC/APC, LC/APC
				16		64	2U, LC/APC
	Difference of each output power	(dB)	-0.5		+0.5		
	Output power adjustable range	(dB)	-6		0		
	Noise figure (Pin=0dBm)	(dB)		4.5	5.0	SA5437	
	Polarization dependence loss	(dB)			0.3		
	Polarization dependence gain	(dB)			0.4		
	Polarization mode dispersion	(ps)			0.3		
	Input/output isolation	(dB)	30				
Pump power leakage	(dBm)			-30			
Echo loss	(dB)	55			APC		
General feature	SNMP network management interface		RJ45				
	Communication interface		RS232				
	Power supply	(V)	90		265	220VAC	
			30		72	-48VDC	
	Power Consume	(W)			150		
	Work temp.	($^{\circ}$ C)	-5		65		
	Storage temp.	($^{\circ}$ C)	-40		80		
	Operating relative humidity	(%)	5		95		
	Size (W) \times (D) \times (H)	(mm)	19 \times 14.5 \times 1.75 (") 483 \times 368 \times 44 (mm)			1RU (19")	
			19 \times 14.5 \times 3.5 (") 483 \times 368 \times 89 (mm)			2RU (19")	

Remark: The output power of EDFA can be customized by user.

SA5400A, SA5400B

High-power Multi-ports output

CATV EDFA (1540~1563nm)

Product series

Model	Total output power	Number of output port	Each port output power	Connector
SA5426A-08	≥26dBm(400mW)	8	≥15.5dBm	SC/APC, LC/APC
SA5426A-16		16	≥12.0dBm	SC/APC, LC/APC
SA5427A-08	≥27dBm(500mW)	8	≥16.5dBm	SC/APC, LC/APC
SA5427A-16		16	≥13.0dBm	SC/APC, LC/APC
SA5428A-08	≥28dBm(630mW)	8	≥17.5dBm	SC/APC, LC/APC
SA5428A-16		16	≥14.0dBm	SC/APC, LC/APC
SA5429A-08	≥29dBm(800mW)	8	≥18.5dBm	SC/APC, LC/APC
SA5429A-16		16	≥15.0dBm	SC/APC, LC/APC
SA5430B-08	≥30dBm(1000mW)	8	≥19.5dBm	SC/APC, LC/APC
SA5430B-16		16	≥16.0dBm	SC/APC, LC/APC
SA5431B-08	≥31dBm(1260mW)	8	≥20.5dBm	SC/APC, LC/APC
SA5431B-16		16	≥17.0dBm	SC/APC, LC/APC
SA5431B-32		32	≥13.5dBm	LC/APC
SA5432B-08	≥32dBm(1580mW)	8	≥21.5dBm	SC/APC, LC/APC
SA5432B-16		16	≥18.0dBm	SC/APC, LC/APC
SA5432B-32		32	≥14.5dBm	LC/APC
SA5433B-08	≥33dBm(2000mW)	8	≥22.5dBm	SC/APC, LC/APC
SA5433B-16		16	≥19.0dBm	SC/APC, LC/APC
SA5433B-32		32	≥15.5dBm	LC/APC
SA5433B-64		64	≥12.0dBm	LC/APC
SA5434B-08	≥34dBm(2510mW)	8	≥23.5dBm	SC/APC, LC/APC
SA5434B-16		16	≥20.0dBm	SC/APC, LC/APC
SA5434B-32		32	≥16.5dBm	LC/APC
SA5434B-64		64	≥13.0dBm	LC/APC
SA5435B-16	≥35dBm(3160mW)	16	≥21.0dBm	SC/APC, LC/APC
SA5435B-32		32	≥17.5dBm	LC/APC
SA5435B-64		64	≥14.0dBm	LC/APC
SA5436B-16	≥36dBm(4000mW)	16	≥22.0dBm	SC/APC, LC/APC
SA5436B-32		32	≥18.5dBm	LC/APC
SA5436B-64		64	≥15.0dBm	LC/APC
SA5437B-32	≥37dBm(5000mW)	32	≥19.5dBm	LC/APC
SA5437B-64		64	≥16.0dBm	LC/APC

Remark: 1. All EDFAs in SA5400 series with specified output power and output ports can be in 2U casing. 2. Please contact with us for detailed datasheet of EDFA if special output power and output ports configuration is required.