

HA5400A

(1550nm CATV Erbium Doped Fiber Amplifier)

PRODUCT DESCRIPTION

HA5400A(1RU) series is a high power multi-ports optical amplifier with gain spectrum band within 1540~1563nm. It is mainly designed for the application of CATV or 1~8 continuous banding channel (ITU wavelength). It offers a flexible and low-cost solution for CATV large area coverage of metropolises and medium-sized cities.

HA5400A optical amplifier adopts the world's top class pump laser and active 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.



HA5400A has extremely low noise figure, the entire unit

adopts twin-stage amplification, and the pre-amplifier adopts low noise EDFA, output cascade adopts high power EYDFA. When input optical power Pin=0dBm, the noise figure of unit is <5.5dB Unlike other kind of product which need high optical power input to maintain lower noise figure.

HA5400A LCD at the front panel offers the work index of all equipment and warning alarms. The laser will switch off automatically if optical power is missing, which offers security protection for the laser.RS232 and RJ45 offer serial commutation and SNMP network management port. All the optical port of optical amplifier can be installed in the front panel or back panel.

HA5400A optional two-way optical input (built-in 2x1 optical switch), can be used for self-healing ring network or redundant backup network.

HA5400A with carrier-class reliability and network security management, high quality, high reliability and excellent cost performance and is ideal for system integrators and system operator.

HA5400A:19" 1RU rack, The total maximum output power of 37dBm (5000mW), optional output port up to 32 optional port .



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PRODUCT FEATURE

- Total output power optional 500~5000mW(27~37dBm)
- ▶ 19" 1RU rack, optional output port up to 32 optional port.
- Built-in low noise pre-amplifier, not necessary EDFA cascade, extremely
- ► lower the CNR, MER degradation of the system
- Low noise figure ≤5.5dB
- ▶ Perfect RS232, SNMP
- ► Telecom level safety reliability and network management.
- Simplified machine-room links, improve the system reliability.
- ► Simple and reliable in construction/maintenance
- Optional dual optical input, built-in 2 × 1 optical switch
- Dual power supply optional, 1+1 backup
- Can reduce the 98% device space usage
- Can reduce the 85% device purchase cost
- ► Can reduce 95% power consumption
- The best cost performance in industry.

Technique index

MAIN APPLICATION

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

	Duf			Index	Quarterest			
	Performance		Min.	Тур.	Max.	Supplement		
	Operating wavelength range	(nm)	1540		1563	CATV		
	Input power	(dBm)	-10		+10			
	Total output power ¹⁾	(dBm)			37			
	Number of output ports	(pcs)			32			
Opt	Each output power	(dBm)	0		22			
Optical feature	Difference of output power	(dB)	-0.5		+0.5			
ture	Output optical power monitoring	(dB)		-20		Optional		
	Output power adjustable range	(dBm)	-6		0	Optional		
	Noice figure (Din=0dPm)	(dD)		4.5	5.5	HA5400A-1x □ □ □		
	Noise figure (Pin=0dBm)	(dB)		5.0	6.0	HA5400A-2x □ □ □		
	Switch time	(ms)			8.0	HA5400A-2x □□□		



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	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
	Network management interface			RJ45		SNMP
	Series interface			RS232		
	Power supply	(V)	90		265	220VAC
Gen		(V)	30		72	-48VDC
General feature	Power consume	(W)			50	
ature	Operating temp.	(°C)	-5		65	
	Storage temp.	(°C)	-40		80	
	Relative humidity	(%)	5		95	
	Size (W)×(D)×(H)	(")		19×14.3×1.75	5	1RU (19")

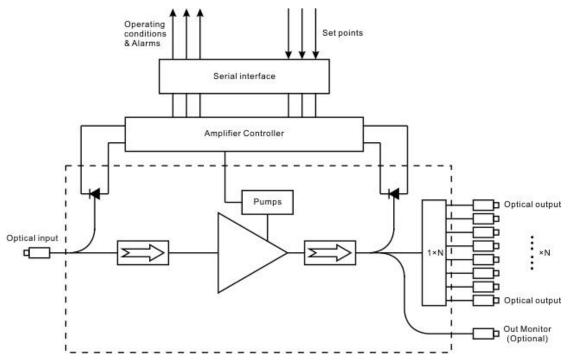
Remark: Output power can be customized by user.



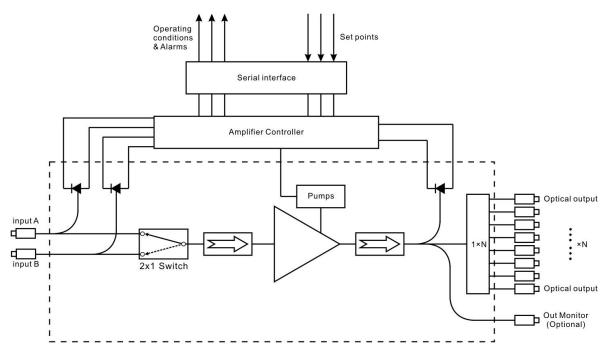
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OPTIC/ELECTRICAL SCHEMA

HA5400A-1x DDD (conventional)



HA5400A-2x DDD (Built-in Optical Switch)





PRODUCT SERIES

Model number	Total output power	Number of output port	Each port output power	Connector		
HA5427A-1×008		8	16.5	SC/APC、LC/APC		
HA5427A-2×008	27dBm(500mW)	o	10.5	SU/APC, LU/APC		
HA5428A-1×008	28dBm(630mW)	8	17.5	SC/APC、LC/APC		
HA5428A-2×008	200011(0301110)	0	17.5			
HA5429A-1×008		8	18.5			
HA5429A-2×008	29dBm(800mW)	0	10.5			
HA5429A-1×016	230011(00011111)	16	15.0	- SC/APC、LC/APC		
HA5429A-2×016		10	15.0			
HA5430A-1×008		8	19.5			
HA5430A-2×008	30dBm(1000mW)	0	19.5	SC/APC、LC/APC		
HA5430A-1×016	300Bm(1000mw)	16	16.0			
HA5430A-2×016		10	10.0			
HA5431A-1×008		8	20.5			
HA5431A-2×008	31dBm(1260mW)	0	20.3	SC/APC、LC/APC		
HA5431A-1×016	31dbm(1200mW)	16	17.0			
HA5431A-2×016		10	17.0			
HA5432A-1×008		8	21.5			
HA5432A-2×008	32dBm(1600mW)	0	21.5	SC/APC、LC/APC		
HA5432A-1×016	32dBm(1000mW)	16	18.0	SC/APC LC/APC		
HA5432A-2×016		10	10.0			
HA5433A-1×016		16	19.0	SC/APC、LC/APC		
	33dBm(2000mW)	10	19.0	SUAPC: LUAPC		
HA5433A-1×032	330DHI(2000HIW)	32	15.5	LC/APC		
HA5433A-2×032		32	10.0	LU/APU		
HA5434A-1×016		16	20.0			
HA5434A-2×016		16	20.0	SC/APC、LC/APC		
HA5434A-1×032	34dBm(2500mW)	20	16 E	LC/APC		
HA5434A-2×032		32	16.5			



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HA5435A-1×016		16	21.0	SC/APC、LC/APC		
HA5435A-2×016		10	21.0			
HA5435A-1×032	33dBm(3200mW)	32	17.5	LC/APC		
HA5435A-2×032		52	17.5			
HA5436A-1×016		10	22.0	SC/APC、LC/APC		
HA5436A-2×016	00 (Dec (4000) (M))	16	22.0			
HA5436A-1×032	- 36dBm(4000mW)	32	40 F			
HA5436A-2×032	-	32	18.5	LC/APC		
HA5437A-1×032		20	40 F			
HA5437A-2×032	37dBm(5000mW)	32	19.5	LC/APC		

MODEL EXPLANATION

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Product series	Op Wav	erating velength	P	roduct type	Total Powe	Output er(dBm)	Ex	terior		Funciton	F	Enter the port number		ne output rt number	с	onnector	P	ower mode	Pov	wer supply		Output Optical port Monitoring		
Amplifier of	5			1540~		High-output	27	27	A	1RU	0	Without		Single input	008	8 ports	LA	LC/APC	s	Single PS	22	220VAC		Without
communication class		1563nm	1	Multi-port output	28	28		Optical power adj.		1 (Without Switch)	016	16 ports	LP	LC/UPC	D	Dual PS	48	-48VDC	00					
					29	29	С	3RU			2	Dual input (With Switch)	032	32 ports	SA	SC/APC		Dual PS	42	-48VDC &220VAC	мо	With output optical port monitoring		
					30	30	Е	5RU			2				SP	SC/UPC		Hot plug						
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					32	32																		
					33	33																		
					34	34																		
					35	35																		
					36	36																		
					37	37																		