HA5800B-FA (2RU)

Front-Access High-Power PON EYDFA

1540–1563 nm | Short-Depth | High-Density | Hot-Swappable

PRODUCT DESCRIPTION



The HA5800B-FA Series is a new-generation high-power EYDFA platform developed for FTTx/PON headends, CATV overlay networks and high-density optical access environments.

Designed with a compact 19-inch 2RU short-depth chassis, the platform brings optical connections, system control, hot-swappable power modules and front-serviceable cooling modules to the front panel, simplifying installation, daily operation and maintenance in modern telecom racks and space-constrained equipment rooms.

The system combines a low-noise EDFA pre-amplifier with a high-power EYDFA output stage, providing stable multi-port optical distribution with total output power up to 38 dBm and configurations of up to 32 optical output ports.

Flexible CWDM wavelength options support current GPON and XGS-PON deployments as well as future network migration requirements. Carrier-class architecture provides redundant power options, intelligent monitoring, alarm protection, SNMP network management and application-specific optical configuration.

With flexible wavelength plans, port configurations, optical interfaces and system-level OEM/ODM customization, the HA5800B-FA Series is designed as a future-ready optical amplification platform for long-term PON network deployment.

PRODUCT FEATURE

- ▶ Ultra-Short-Depth Design for Modern Telecom Racks
- ▶ Full Front Access for Faster Operation & Maintenance
- ▶ Hot-Swappable Power and Fan Modules
- ▶ Up to 38 dBm / 32-Port High-Density EYDFA Platform
- ▶ Future-Ready PON Coexistence & Migration Architecture
- ▶ Carrier-Class Redundancy, Monitoring & Remote Management
- ▶ Application-Specific Optical and System Customization

MAIN APPLICATION

- ▶ FTTx / PON Headend Networks
- ▶ CATV / RF Overlay Distribution
- ▶ GPON / XGS-PON Migration & Coexistence
- ▶ High-Density Optical Distribution
- ▶ Redundant & Self-Healing Optical Networks
- ▶ Telecom Headends and Central Offices

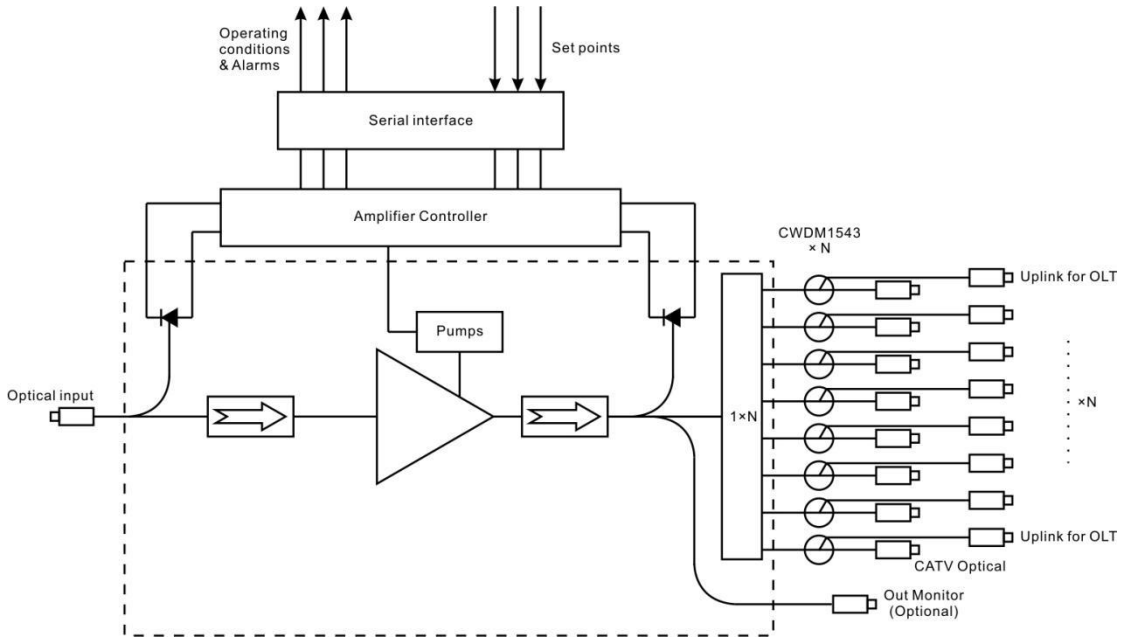
TECHNIQUE INDEX

Performance			Index			Supplement
			Min.	Typ.	Max.	
Optical feature	CATV Operation Wavelength	(nm)	1539		1565	CATV
	OLT Pass Wavelength	(nm)	1310/1490			HA5800B-FA-WD1
			1270~1505.5,1580~1620			HA5800B-FA-WD2
	CATV Pass Wavelength Loss	(dB)			0.8	1550nm
	OLT Pass Wavelength Loss	(dB)			0.8	1310/1490nm
	CATV & OLT isolation	(dB)	40			
	Number of Uplink Optical Ports (for OLT)	(pcs)			64	
	CATV Input Power (Pi)	(dBm)	-10		+10	
	Total Output Power[1)]	(dBm)			41	
	Number of Output Ports	(pcs)			64	
	Each Port Output Power	(dBm)	0		22	
	Difference of Each Output Power	(dB)	-0.5		+0.5	
	Output Optical Power Monitoring	(dB)		-20		Optional
	Output Power Adjustable Range	(dBm)	-6		0	Optional
	Noise Figure	(dB)		4.5	5.5	HA5800B-1X032
				5.0	6.0	HA5800B-2X032
	Switch Time	(ms)			8.0	
	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	

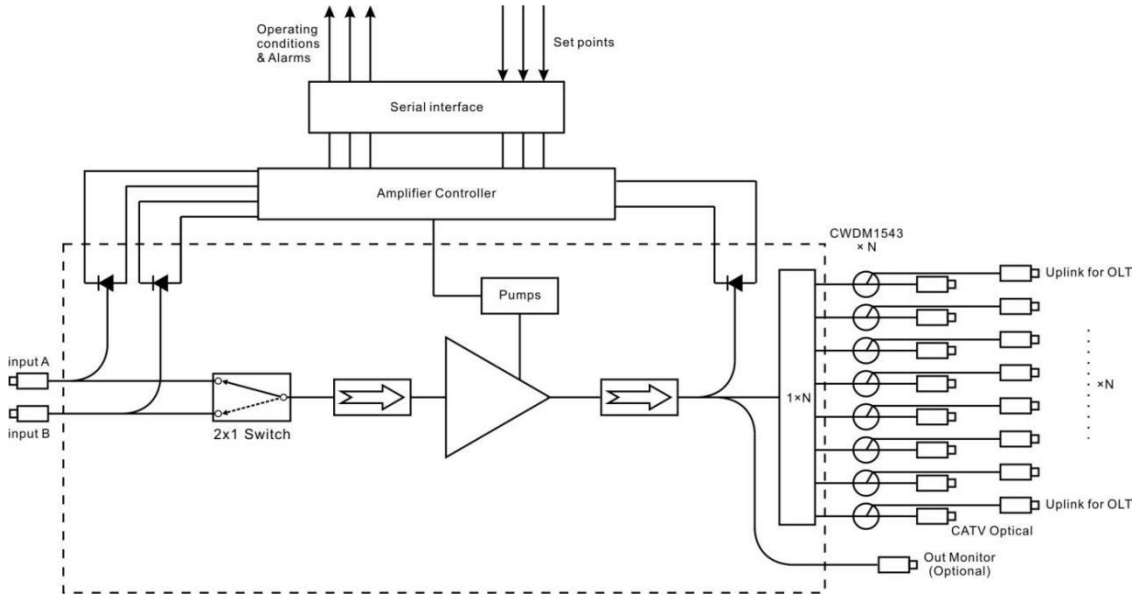
	Echo Loss	(dB)	55			APC
General feature	Network Management Interface		RJ45			SNMP
	Serial Interface		RS232			
	Power Supply	(V)	90		265	220VAC
			30		72	-48VDC
	Power Consume	(W)			84	
	Operation Temp.	(°C)	-5		65	
	Storage Temp.	(°C)	-40		80	
	Relative Humidity	(%)	5		95	
	Size (W)×(D)×(H)	（mm)	468×226×88			HA5800B-2X032

OPTIC/ELECTRICAL SCHEMA

HA5800B-1x □□□ (conventional)



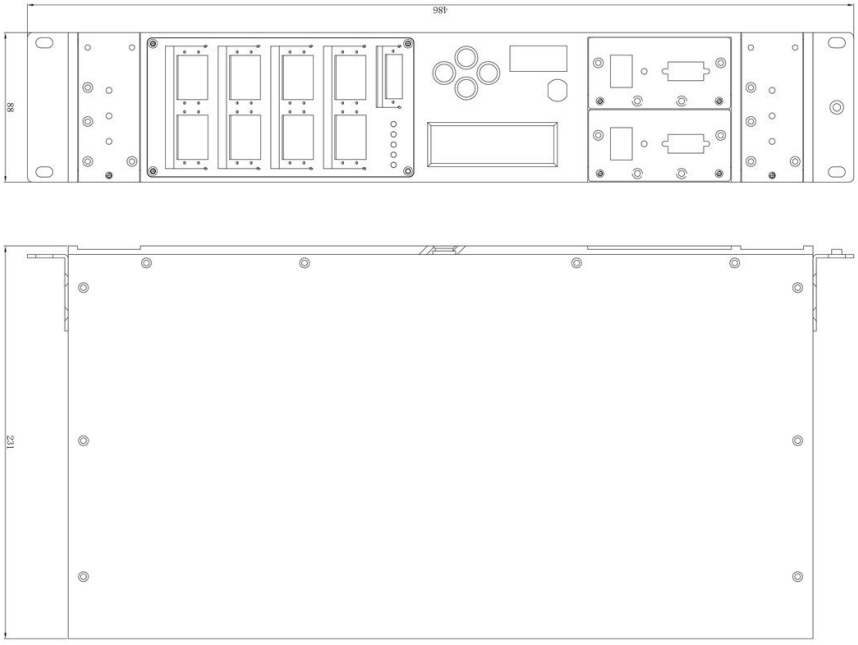
HA5800B-2x □□□ (Built-in Optical Switch)



PRODUCT SERIES

Model number	Total output power	Number of output	Each port output	Connector
HA5831B-1×032	31dBm (1260mW)	32	13.0	SC/APC、LC/APC
HA5831B-2×032				
HA5832B-1×032	32dBm (1600mW)	32	14.0	SC/APC、LC/APC
HA5832B-2×032				
HA5833B-1×032	33dBm (2000mW)	32	15.0	SC/APC、LC/APC
HA5833B-2×032				
HA5834B-1×032	34dBm (2500mW)	32	16.0	SC/APC、LC/APC
HA5834B-2×032				
HA5835B-1×032	35dBm (3200mW)	32	17.0	SC/APC、LC/APC
HA5835B-2×032				
HA5836B-1×016	36dBm (4000mW)	16	21.5	SC/APC、LC/APC
HA5836B-2×016				
HA5836B-1×032		32	18.0	SC/APC、LC/APC
HA5836B-2×032				
HA5837B-1×032	37dBm (5000mW)	32	19.0	SC/APC、LC/APC
HA5837B-2×032				
HA5838B-1×032	38dBm (6300mW)	32	20.0	SC/APC、LC/APC
HA5838B-2×032				

DIMENSIONS



MODEL EXPLANATION

HA 5 8 □□ B - □ × □□□ - □□ - □ / □□ - □□□ - □□

Product series	Operating Wavelength		Product type		Total Output Power(dBm)		Exterior		Enter the port number		The output port number		Connector		Power mode		Power supply		Output Optical port Monitoring		WDM	
Amplifier of communication class	5	1540~1563nm	8	FTTx PON EDFA	31	31	B	2RU	1	Single input (Without Switch)	032	32 ports	LA	LC/APC	S	Single PS	22	220VAC	00	Without	WD1	With WDM
					32	32	A	1RU					LP	LC/UPC	D	Dual PS	48	-48VDC				
					33	33	C	3RU	2	Dual input (With Switch)			SA	SC/APC	P	Dual PS Hot plug	42	-48VDC &220VAC	MO	With output optical port monitoring	WD2	With WDM
					34	34	E	5RU					SP	SC/UPC								
					35	35																
					36	36																
					37	37																
					38	38																

Model number	Total output power	Number of output port	Each port output power	Connector
HA5831B-1×032	31dBm (1260mW)	32	13	SC/APC、LC/APC
HA5831B-2×032				
HA5832B-1×032	32dBm (1600mW)	32	14	SC/APC、LC/APC
HA5832B-2×032				
HA5833B-1×032	33dBm (2000mW)	32	15	SC/APC、LC/APC
HA5833B-2×032				
HA5834B-1×032	34dBm (2500mW)	32	16	SC/APC、LC/APC
HA5834B-2×032				
HA5835B-1×032	35dBm (3200mW)	32	17	SC/APC、LC/APC
HA5835B-2×032				
HA5836B-1×016	36dBm (4000mW)	16	21.5	SC/APC、LC/APC
HA5836B-2×016				
HA5836B-1×032		32	18	SC/APC、LC/APC
HA5836B-2×032				
HA5837B-1×032	37dBm (5000mW)	32	19	SC/APC、LC/APC
HA5837B-2×032				
HA5838B-1×032	38dBm (6300mW)	32	20	SC/APC、LC/APC
HA5838B-2×032				