HSA4100 (With SNMP)

C-Band Single Channel Booster EDFA (SBA)

PRODUCT DESCRIPTION

HSA4100 series is a booster EDFA designed specifically for single wavelength optic transmission system. It is installed in the output end of optical transmitter, used for improving the output power of the optical transmitter, and extending the signal transmission distance.

HSA4100 adopts the world's top class pump laser. Its excellent optic performance, advanced eletronic circuit and low consumption greatly reduced the heat power consumption of whole unit. Perfect FGC, ATC control, excellent design in the ventilation and heat-dissipation, ensures the long life and high reliability work of pump laser. The LCD at the front panel offers the work index and warning alarm of all equipment. RS232 and RJ45 offer serial commutation and SNMP network management port. The laser will switch off automatically if optical power is missing, which offers security protection for the laser. All the optical port can be installed in the front panel, also can be in the back panel if customers specify.

PRODUCT FEATURES

- ▶Covered full C-Band.
- ▶High gain, low noise.
- ▶Telecommunication-grade security and reliability, and network management function.
- ▶The LCD, LED at the front panel offers the work index and warning alarm of all equipment.
- ▶Standard RS232 communication interface.
- ▶10/100M Ethernet interface supports SNMP and WEB remote network management.
- ▶1+1 powers supply back up ,hot-plug function available.
- ▶Low power consumption.
- ▶Excellent P/P ratio in area.

MAIN APPLICATION

- ▶Long distance trunk network
- ▶MAN or access network
- ▶All kinds of SDH/PDH transmission system
- ▶FTTx PON

TECHNICAL INDEX

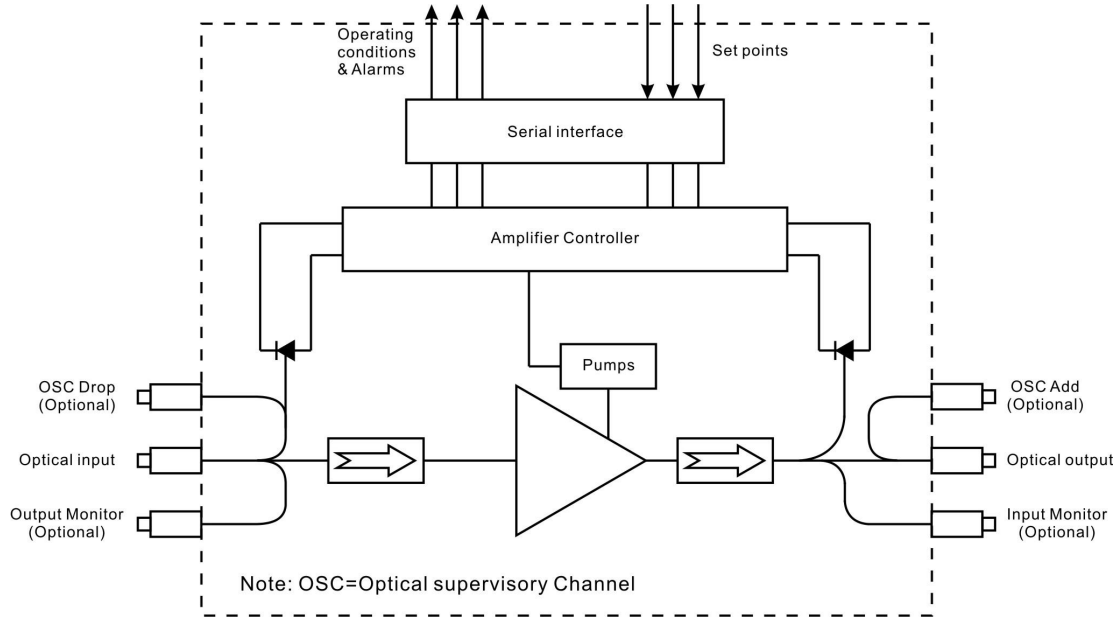
Performance			Index			Supplement
			Min.	Typ.	Max.	
Optic feature	Working wavelength range	(nm)	1528		1564	C-Band
	Input optical power (Pi)	(dBm)	-10		+6	
	Output optical power (Po)	(dBm)	10		25	
	Noise figure	(dB)		5.0		Max output, max gain
	Polarization dependence loss (PDL)	(dB)			0.3	
	Polarization dependence gain (PDG)	(ps)			0.3	
	Polarization mode dispersion (PMD)	(dB)			0.3	
	Input/output optical isolation	(dB)	30			
	Pump power leakage	(dBm)			-30	
	Echo loss	(dB)	45			UPC
			55			APC
	Optical supervisory channel wavelength ranges	(nm)	1500	1510	1520	
General feature	SNMP network management interface		RJ45			
	Communication interface		RS232			
	Power supply	(V)	90		265	220VAC
			30		72	-48VDC
	Power consumption	(W)			30	
	Working temp.	(°C)	-5		+70	
	Storage temp.	(°C)	-40		+85	
	Working relative humidity	(%)	+5		+95	
	Size (W)×(D)×(H)	(mm)	483×205×44			

Remark: 1. Output power can be customized by user.

SOFTWARE FUNCTION MONITORING AND ALARM

Functions	In-Service Firm ware Upgrades
	Auto Shut Down
	Fixed Gain Control mode and Power limiting (AGC)
	Output Power Control Mode (APC)
	Pump Current Control Mode (ACC)
	Pump Maximum Working Current limit Protection
Monitors	Total Input Power
	Total Output Power
	Pump Status
	Chassis Temperature
Alarms	Loss-of-Signal Alarm
	Chassis Temperature Alarm
	Pump Temperature Alarm
	Pump Bias Alarm

OPTO-ELECTRICAL DIAGRAM



PRODUCT SERIES

Model	Max Output power(dBm) (Pin=0dBm)	Wavelength (nm)	Monitor optical port mode	OSC Optical port mode
HSA4110-M00-O00	10	1528~1564 C-Band	Without	Without
HSA4113-M00-O00	13			
HSA4117-M00-O00	17			
HSA4118-M00-O00	18			
HSA4119-M00-O00	19			
HSA4120-M00-O00	20			
HSA4123-M00-O00	23			
HSA4124-M00-O00	24			
HSA4125-M00-O00	25			

Note :1) Monitor optical port mode options :1 . MO (With output monitor optical port)

2 . MI (With input monitor optical port)

3 . MIO (With input and ouput monitor optical port)

2) OSC Channel optical port light management: 1 . OD (OSC / Drop)

2 . OA (OSC / Add)

3 . ODA (OSC / Drop & Add)

MODEL EXPLANATION