

EDFA-41 series C-Band Booster



The EDFA-41 Booster series are the ideal equipment for achieving DWDM telecom long range transmissions or CATV operator network extensions. The Boosters usually install at launch sites, just after the transmitting laser. With an advanced AGC electronics they provide ideal channel gain flatness while covering the whole 45 channels available in the DWDM C Band spectrum. EDFA-41xx Booster series features a low power consumption design that provides low thermal dissipation and greater life span of the EDFA pump.

The EDFA-41xx Booster series have LCD panel for local management as well as console and Ethernet ports for remote management. SNMP and web management is available on all EDFA series products.

Applications

- 45 channels DWDM system
- Long distance trunk network
- MAN or access network
- SDH/PDH transmission system
- FTTx PON

Features

- C-Band operating wavelength: 1529.16~1563.86nm
- excellent gain flattened feature (GF<1.0dB)
- low noise figure
- Carrier-class security and reliability, SNMP and web network management
- LCD & LED front panel provide direct status and warning alarms
- Standard RS232 console interface
- 10/100M Ethernet interface supports SNMP and WEB remote network management
- optional redundant power supplies supporting hot-swap function
- optional configurable optical monitoring ports for input and output ports on booster
- low power consumption

Technical specifications

Performance		Index			Supplement		
		Min	Typ	Max			
Optic feature	Operation Wavelength range(λ)	(nm)	1528		1565	C-Band	
	Input power	(dBm)	-10	+3	+10		
	Maximum output power ¹⁾	(dBm)			13	EDFA-4113	
					17	EDFA-4117	
					20	EDFA-4120	
					22	EDFA-4122	
					23	EDFA-4123	
					24	EDFA-4124	
					25	EDFA-4125	
			26	EDFA-4126			
	Output power adjustable range	(dBm)	-6		0	P type	
	Number of output ports		1		8	FC, SC	
			1		16	LC	
	Difference of each output power	(dB)	-0.5		+0.5		
	Gain flatness (peak-to-peak, Nominal gain)	(dB)	Single channel		SCH		
				0.4	0.5	F05, $\leq \pm 0.25$	
				0.8	1.0	F10, $\leq \pm 0.5$	
				1.5	2.0	F20, $\leq \pm 1.0$	
	Noise figure (Max output, max gain)	(dB)		4.0	4.5	EDFA-4113	
				5.0	5.3	EDFA-4117	
			5.5	5.8	EDFA-4120		
			6.0	6.3	EDFA-4123		
			6.5	6.8	EDFA-4126		
Polarization dependence loss	(dB)			0.3			
Polarization dependence gain	(dB)			0.5			
Polarization mode dispersion	(ps)			0.3			
Input/output isolation	(dB)	30					
Pump power leakage	(dBm)			-30			
Echo loss	(dB)	40			UPC		
		55			APC		

General feature	SNMP network management interface		RJ45		
	Communication interface		RS232		
	Power supply	(V)	90	265	220VAC
			30	72	-48VDC
	Power consumption	(W)		50	
	Work temp.	(°C)	0	65	
	Storage temp.	(°C)	-40	80	
	Operating relative humidity	(%)	5	95	
	Size (W)×(D)×(H)	(")	19×14.5×1.75		1RU (19")
		(")	12.4×15.4×5.25		3D (12.4", desk-type)
(mm)		150×125×22		Modulator	

Remark:

1. Output power is user configurable.

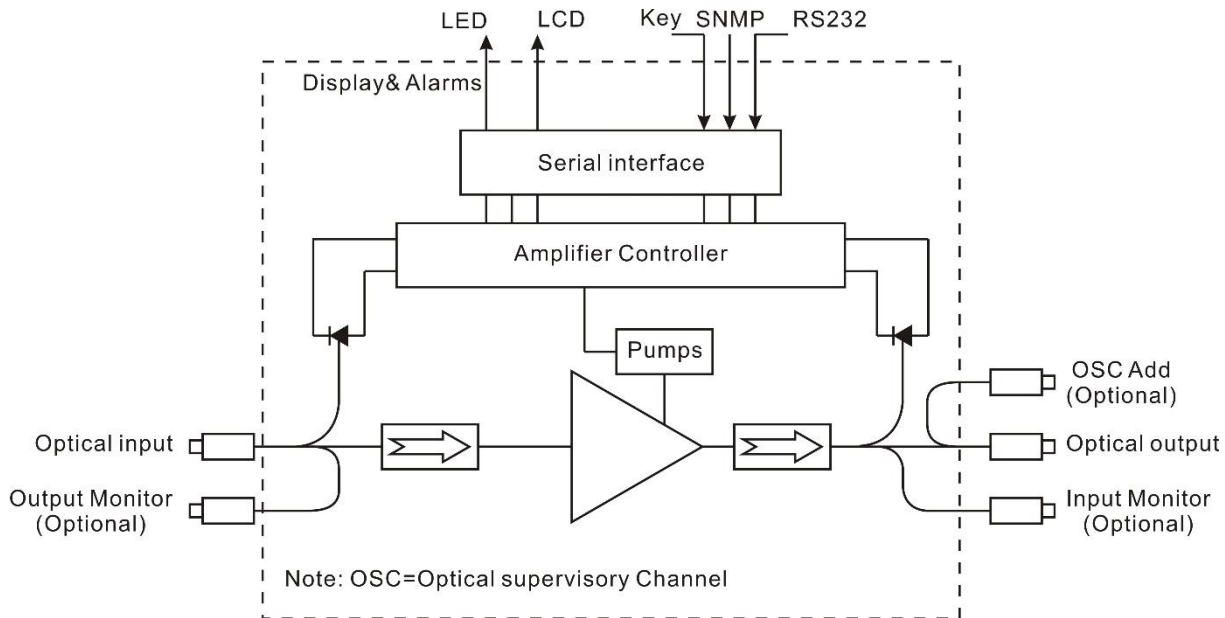


Model	Output power Max (dBm)	Max. Gain (dB)	Gain flatness (dB)	Wavelength (nm)	Function	Optical port mode
EDFA-4113-M4-SCU-AD	13	13	≤±0.5	1528~1565	With SNMP network management, output power 0 ~ -6dB adj.	4 ports, with input / output monitor port
EDFA-4117-M4-SCU-AD	17	17				
EDFA-4120-M4-SCU-AD	20	20				
EDFA-4123-M4-SCU-AD	23	23				
EDFA-4126-M4-SCU-AD	26	26				

Remarks:

- 1) Gain flatness feature F05 (≤±0.25dB) and F20 (≤±1.0dB) optional.
- 2) Output power adjustable P type optional.
- 3) Optical ports M4 optional, with input and output supervise port.

Operating diagram



Ordering information

EDFA – 41XX – YY – CCC – ZZ

EDFA	41	Saturation power (dBm)	Monitor ports	Optical connectors	Power configuration
DWDM 45 channels operation (C-Band)	41- Booster	13	M0 – no monitoring	SCP – SC/UPC	AC – single AC 90-240V PS
	42- Inline Amplifier	17	M1 – input port monitor	SCA – SC/APC	DC – single DC36-72V PS
	43 – Pre Amplifier	20	M2 – output port monitor	LCU – LC/UPC	AA – dual AC 90-240V PS
		22	M4 – input and output port monitor	LCA – LC/APC	DD – dual DC36-72V power supplies
		24		FCP – FC/UPC	AD – one AC 90-240V and one DC 36-72V power supplies
		25		FCA – FC/APC	
		27			
	28				
	30				

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