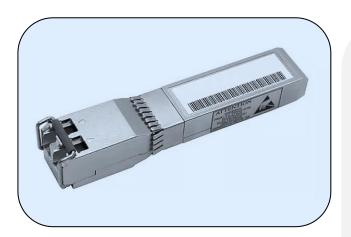


# XTAEBC-17Lx

# SFP+ EDFA Optical Amplifier



### **Applications**

- Extension of the existing WDM connections like 5G backhaul links and Data Center Interconnect (DCI) links
- Signal conditioning for ROADM systems
- Extending also 100Gb coherent and PAM4 connections
- Power boosting optical amplifiers for DWDM metro systems

#### **Features**

- Standard SFP+ compliant size and pinout
- Control and monitoring through I2C
- Smart use of space employing the unused switch ports
- Large input dynamic range
- Adjustable output power
- Saturation output power at +17dBm
- APC or AGC operation versions
- Booster version
- LVTTL alarm output
- Single +3.3 V power supply with low power consumption compatible with the most host devices
- Operating case temperature
  -5°C to +75°C (Commercial)

# **Description**

XTAEBC-17Lx is EDFA module with control circuitry built in SFP+ form factor that enables simple installation in unused ports of existing switches. It is designed to amplify optical signals in C-band for fiber optic communications like 5G networks, DCI, DWDM systems and CATV networks. It provides noise figure of 6 dB in C-band. Its size is 14 x 72 x 13.1 mm, thus 15 mm longer than standard SFP+ size, but compatible with standard SFP+ socket. XTAExC-xxLx is available as Optical booster amplifier with two modes of operation — Automatic power control (APC) that stabilizes output power or Automatic Gain control (AGC) that exhibits constant optical gain for wide spectrum of input signals.

#### **Electric and environmental Characteristics**

Parameter	Specification		
Power Supply Voltage	+3.3V		
Interface	I2C		
Alarm	LVTTL		
Operating case temperature	-5°C to +75°C		
Storage temperature	-40°C to +85°C		
Storage humidity	5 to 85% RH		
Power consumption	1.8 W		



## **Optical Characteristics**

Parameter	Symbol	Booster Specification			l lait
		Min	Тур	Max	Unit
Signal wavelength range	λ	1527.99	-	1568.36	nm
Input power	$P_{IN}$	-20	-	0	dBm
Saturation output power	P <sub>OUT</sub>	-	17 <sup>(1)</sup>	-	dBm
Gain	G	-	17 <sup>(1)</sup>	-	dB
Gain flatness	$G_{FLAT}$	-	-	5.5	dB
Noise figure	NF	-	6.0	7.0	dB
Optical isolation	ISO	20	-	-	dB
Return loss	RL	40	-	-	dB
Polarization mode dispersion	PMD	-	-	0.5	ps
Polarization dependent gain	PDG	-	-	0.5	dB
Control scheme		APC or AGC with FLS <sup>(2)</sup>			

#### **Notes**

- 1. Input power = 0 dBm, set gain = 17 dB, full wavelength range
- 2. FLS: Forced Laser Shutdown

# **Ordering information**

Part number	Product Description		
XTAEBC-17LP	SFP+ EDFA, booster, C-band, 17 dBm max. output power, LC, Autom. Power Control		
XTAEBC-17LG	SFP+ EDFA, booster, C-band, 17 dBm max. output power, LC, Automat. Gain Control		

Notes

These modules are available in multiple customized compatible versions. Please specify any compatibility requirements at time of ordering. Standard MSA compatible pluggable components may not work or some function of these components may not be available in devices that require customized compatible devices. Pluggable components compatible with one type of communications equipment may not work in other type of communications equipment.

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