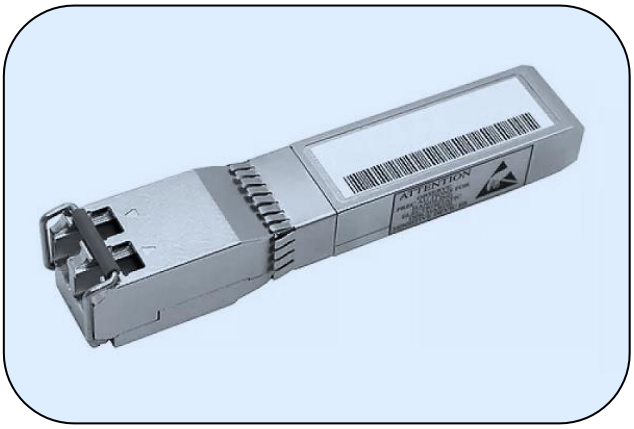
XTAPC-10Lx

SFP+ EDFA Optical Amplifier



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 +10dBm
- APC or AGC operation versions
- Pre-amplifier version
- LVTTL alarm output
- Single +3.3 V power supply with low power consumption compatible with the most host devices

Applications

- Extension of 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
- Pre-amplification optical amplifiers for DWDM metro systems

Description

XTAEPC-10Lx 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. XTAEPC-10Lx is available as optical pre-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	Pre-Amp. Specification			Unit
		Min	Typ	Max	
Signal wavelength range	λ	1527.99	-	1568.36	nm
Input power	P_{IN}	-30	-	-10	dBm
Saturation output power	P_{OUT}	-	10(1)	-	dBm
Gain	G	-	20(1)	-	dB
Gain flatness	G_{FLAT}	-	-	5.5	dB
Noise figure	NF	-	6.5	7.5	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(2)			

Notes

1. Input power = -10 dBm, set gain = 20 dB , full wavelength range
2. FLS : Forced Laser Shutdown

Ordering information

Part number	Product Description
XTAEPC-10LP	SFP+ EDFA, pre-emphasis, C-band, 10 dBm max. output power, LC, Automatic Power Control
XTAEPC-10LG	SFP+ EDFA, pre-emphasis, C-band, 10 dBm max. output power, LC, Automatic Gain Control

Notes

[1] For accurate order specification please contact XenOpt reseller before placing an order. The content of this document is subject to change without notice.

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.

To find out more, please contact: