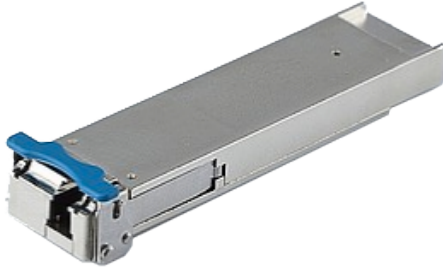




10.3Gbps XFP Bi-Directional Transceiver

P/N 4ER0P00-3327 (40km, 1330nm Tx)

P/N 4ER0P00-2733 (40km, 1270nm Tx)



Description

Menara Networks' bi-directional XFP transceivers are designed for use in links of 40km over a single fiber. The XFP module supports 10G Ethernet, OC-192/STM-64 and 10G Fiber Channel applications and interoperates with all major router and switch vendors.

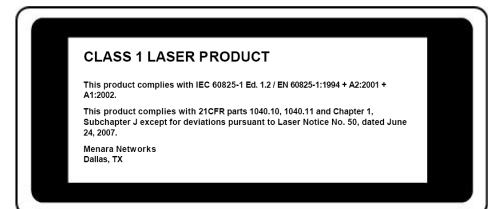
Digital Optical Monitoring interfaces are provided via the XFP INF 8077i Rev 4.5 standards compliant I2C interface. The receiver features differential ac-coupled data outputs and LVTTTL for LOS (Loss of Signal) output. Circuit ground is internally isolated from frame ground.

Applications

- 40km 10GE or OC-192/STM-64 bi-directional single fiber links
- Fiber conservation to customer locations or co-location areas

Features

- Hot-pluggable XFP footprint
- RoHS compliant
- Bi-directional optical data links over single fiber
- Compliant with XFP MSA
- Digital diagnostic INF 8077i compliant
- XFP MSA Loopback support
- 1330nm and 1270nm wavelength use
- Metal package for lower EMI
- Low power dissipation, <2.0W
- LC diplexer connector
- Laser Class 1 IEC/CDRH compliant
- Distances of 40km



Transmitter E-O Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	9.953	-	10.3125	Gb/s	-
Center Wavelength	λ	1320	1330	1340	nm	1
		1260	1270	1280		2
Spectral Width (RMS)	$\Delta\lambda$			1	nm	-
Side Mode Suppression Ratio	SMSR	30			dB	
Average Optical Output Power	P _o	0	-	+4	dBm	
Extinction Ratio	Er	3.5			dB	
Output Eye Diagram	Compliant with Eye Mask Defined in IEEE802.3 standard					
Relative Intensity Noise	RIN			-128	dB/Hz	

Notes:

1. 40km reach, 1330nm Tx and 1270nm Rx

2. 40km reach, 1270nm Tx and 1330nm Rx

Receiver O-E Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Support data rate	-	9.953	-	10.3125	Gb/s	-
Operating Wavelength	λ	1260		1280	nm	1
		1320		1340		2
Receiver sensitivity (40km)	S _{en}	-14			dBm	3
Receiver sensitivity OMA (40km)	S _{en}	-12.5				
Saturation	P _{sat}			+0.5	dBm	
Receiver Optical Return Loss	-			-27	dB	-
LOS Asserted	LOS _A	-30			dBm	
LOD De-assert	LOS _D			-18	dBm	
LOS Hysteresis		1		5	dB	

Notes:

1. 40km reach, 1330nm Tx and 1270nm Rx

2. 40km reach, 1270nm Tx and 1330nm Rx

3. Measured with a PRBS of 2³¹-1 at 1 x 10⁻¹² BER

Ordering Information

Part Number	Description	ROHS Compliant	Operating Case Temperature
4ER0P00-3327 4ER0P00-2733	Bi-directional XFP 40KM 1330Tx/1270Rx 1270Tx/1330Rx	ROHS-6	0 ~ +70°C

x = J for Juniper, x = C for Cisco, x = A for Alcatel, x = O for Cisco ONS

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