

XFP, 10GBASE-LR/10G Ethernet, 1310nm, 10km SMF

10G-XFP-LR Brocade Compatible 10Gbps XFP Transceiver

Features

- Supports XFP 9.95Gb/s to 11.1Gb/s bit rates
- Transmission distance up to 10KM on SMF
- Hot-Swappable if your device supports
- Lifetime Warranty
- Plugs into XFP port
- LC duplex connector
- Compliant to SFP+ Electrical & Mechanical MSA
- 0°C to +70°C case operating temperature range
- Un-cooled 1310nm EML/DFB laser
- RoHS 6/6 compliant
- Built-in digital diagnostic functions
- Compliant with product safety standards



Product Overview

The Hummingbird Networks 100% Brocade Compatible 10G-XFP-LR optical transceiver module is for transmission at 1310nm over single mode fiber. It supports Ethernet standards which make it ideally suited for 10G data communications. It offers customers a wide variety of 10 Gigabit Ethernet connectivity options for data center, enterprise wiring closet, switch-to-switch, and service provider transport applications. Its sub watt power consumption and its excellent EMI performance allow system design with high port density. Module is lead free, RoHS compliant and is designed and tested in accordance with industry safety standards. The Transceivers convert information from electrical to optical format, and back again, at standard data rates.

Ordering Information

Part No.	Dat <mark>a R</mark> ate	Laser	Fiber Type	Distance	Optical Interface	DDMI
10G-XFP-LR-HN	10GBASE-LR/ 10G Ethernet	1310nm	SMF	10KM	LR/LW	No

Transmitter Optical Characteristics

Parameter	Symbol	Min.	Тур.	Max	Unit	Ref.
Optical output Power	Р	-6		0	dBm	
Optical Wavelength	λ	1290		1330	nm	
Optical Extinction Ratio	ER	6			dB	
Sidemode Supression ratio	SSRmin			30	dB	
Average Launch power of OFF transmitter	POFF	-30			dBm	



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Receiver Optical Characteristics

Receiver Sensitivity (OMA) @ 10.7Gb/s	RSENS		-14.5	dBm	
Maximum Input Power	PMAX	+0.5		dBm	
Optical Center Wavelength	λC	1270	1600	nm	
Receiver Reflectance	Rrx		-14	dB	
LOS De-Assert	LOSD		-18	dBm	
LOS Assert	LOSA	-32		dBm	
LOS Hysteresis		1		dB	

Digital Optical Monitoring

Transceivers offer the ability to monitor important module parameters during operation. The temperature, supply voltage, laser bias current, optical transmitter power and receiver optical power parameters are continuously monitored for getting information about the module's current status. All data is calibrated internally; there is no need for external post processing.

Regulatory Compliance

The modules are designed to meet international requirements and standards in terms of product safety. The modules optical output power meets Class 1 requirements for laser safety.

Feature	Standard	Performance	
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883E Method 3015.7	Class 1(>500 V)	
Electromagnetic Interference (EMI)	FCC Part 15 Class B	Compatible with standards	
Laser Eye Safety	FDA 21CFR 1040.10 and 1040.11 EN60950, EN (IEC) 60825-1,2	Compatible with Class I laser product. Compatible with TµV standards	
Component Recognition	UL and CUL	UL file E317337	
Green Products	RoHS	RoHS6	

Additional Information

For more information about our compatible modules, contact:

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