



XFP 10-Gigabit Ethernet Interfaces

- Supports 10-Gigabit Ethernet connectivity in the Matrix X Secure Core Router and Matrix C2 (C2K122-24) switch
- Supports a modular approach to network connectivity, ensuring that you pay for only what you require
- Standards-based design ensures compatibility

- **High-performance interface modules for the Matrix**

- Supports 10GBase-xx Ethernet in Matrix X Secure Core Router and Matrix C2 (C2K122-24)

- **Inherent flexibility**

- Hot-swappable input/output device
- Provides automatic recognition of interface for connectivity to either single-mode fiber or multimode fiber networks

- **Standards-based design**

- Provides connectivity to any IEEE 802.3ae standards-compliant device
- Fully compliant with XFP Multi-Source Agreement
- Offers a uniform form factor, size, connector type and electric pin outs to ensure compatibility

- **Increases return on investment**

- Supports a modular approach to network connectivity, ensuring that you pay for only what you require

High-Performance, Low-Cost 10-Gigabit Ethernet Connectivity

Ideally suited for deployment across a range of applications, from the data center to the enterprise wiring closet, Enterasys' XFP 10-Gigabit Ethernet interface modules deliver a wide variety of high-performance, low-cost connectivity options for serial optical data communication.

These standards-based modules are protocol-agnostic, small-form-factor 10-Gigabit Ethernet transceivers, which comply with IEEE 802.3ae 10-Gigabit Ethernet standards and the specifications of the XFP MSA (Multi-Source Agreement).

The following 10GBASE-xx-XFP interfaces are available.

10GBASE-SR-XFP—XFP 10-Gigabit Ethernet Interface with an 850 nanometer serial port for 10-Gigabit Ethernet over multimode fiber (MMF) via an LC connector. Supports link lengths ranging from 26 meters to 300 meters depending on grade of fiber installation (see “Cabling Specifications”).

10GBASE-LR-XFP—XFP 10-Gigabit Ethernet Interface with 1310 nanometer serial port for 10-Gigabit Ethernet over single-mode fiber (SMF) via an LC connector. Supports 10-Gigabit Ethernet transmission over distances of between 2 km and 10 km.

10GBASE-ER-XFP—XFP 10-Gigabit Ethernet Interface with 1550 nanometer serial port for 10-Gigabit Ethernet over single-mode fiber (SMF) via an LC connector. Supports long-haul 10-Gigabit Ethernet transmission over distances of between 2 km and 40 km.

When designing network infrastructures utilizing 10 Gigabit Ethernet capabilities it is important that designers take careful consideration of the cabling type (i.e., single-mode or multimode fiber) and the performance at a specified wavelength. The performance is characterized by channel insertion loss (cabling attenuation), and modal bandwidth (for multimode fiber).

Specifications

Technical Specifications

Completely integrated Ethernet PHYs

True hot-swappable capabilities

Cabling Specifications

XFP	Wavelength (nm)	Fiber Type	Core Size (micron)	Modal Bandwidth (MHz/km)	Cable Distance
10GBASE-LR-XFP	1310	SMF	8.3/9/10	N/A	10 km
10GBASE-ER-XFP	1550	SMF	8.3/9/10	N/A	40 km
10GBASE-SR-XFP	850	MMF	62.5	160	26 m
		62.5	200	33 m	
		50	400	66 m	
		50	500	82 m	
		50	2,000	300 m	
		50	400	240 m	
		50	500	300 m	

Power (IEEE Specification)

XFP	TX		RX		Link Power
	Min	Max	Min	Max	
10GBASE-LR-XFP	-8.2	0.5	-14.4	0.5	9.4
10GBASE-ER-XFP	-4.7	4.0	-15.8	-1.0	15.0
10GBASE-SR-XFP	-7.3	1.0	-9.9	-1.0	7.3

Specifications

Environmental Specifications

Operating Temperature

10GBASE-LR-XFP: 0° C to 55° C (32° F to 131° F)

10GBASE-ER-XFP: 0° C to 70° C (32° F to 158° F)

10GBASE-SR-XFP: 0° C to 70° C (32° F to 158° F)

Storage Temperature

10GBASE-LR-XFP: -40° C to 80° C (-40° F to 176° F)

10GBASE-ER-XFP: -40° C to 85° C (-40° F to 185° F)

10GBASE-SR-XFP: -55° C to 125° C (-67° F to 257° F)

Physical Specifications

Dimensions

Rear: 0.85 cm (0.33") H x 7.8 cm (3.07") D x 1.84 cm (0.72") W

Front: 1.29 cm (0.51") H x 7.8 cm (3.07") D x 1.84 cm (0.72") W

Ordering Information

10GBASE-SR-XFP

XFP 10-Gigabit Ethernet Interface with 850 nanometer serial port for 10-Gigabit Ethernet over multimode fiber

10GBASE-LR-XFP

XFP 10-Gigabit Ethernet Interface with 1310 nanometer serial port for 10-Gigabit Ethernet over single-mode fiber

10GBASE-ER-XFP

XFP 10-Gigabit Ethernet Interface with 1550 nanometer serial port for long-haul 10-Gigabit Ethernet over single-mode fiber

Warranty

As a customer-centric company, Enterasys is committed to providing the best possible workmanship and design in our product set. In the event that one of our products fails due to a defect in one of these factors, we have developed a comprehensive warranty that protects you and provides a simple way to get your products repaired as soon as possible.

Service and Support

Enterasys understands that superior service and support is a critical component of *Networks that Know*.™ The Enterasys **SupportNet Portfolio**—a suite of innovative and flexible service and support offerings—completes the Enterasys solution. SupportNet offers all the post-implementation support services you need—online, onsite or over the phone—to maintain your network availability and performance.

Additional Information

For additional information, please visit www.enterasys.com/products/

Contact Information

Contact Enterasys Sales at **877-801-7082** or enterasys.com/corporate/contact/contactsales.html

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