

# TN-XFP-xxx Series

## MSA Compliant XFP Modules

### 10GBase-X Fiber Channel, XFP With DMI (LC)



TN-XFP-SR

Applications include: 10G Ethernet Switches and Routers, 10G Fiber Channel Switch Infrastructure, and Metro Edge Switching.

## Features

- Hot-Pluggable XFP Footprint LC Optical Transceiver
- Digital Diagnostic Function
- Compliant with XFP Multi-Sourcing Agreement (MSA)
- XFP Optical Transceiver with duplex LC connector
- 10G Small Form-Factor Pluggable (XFP) MSA Compliant
- INF-8077i Digital Diagnostic Function (DMI)
- Maximum Link Length of 100 km
- Single +3.3V Power Supply
- Low Power Dissipation < 2 Watts
- Low power Dissipation < 1.2 Watts (TN-XFP-SR Module Only)
- RoHS Compliant
- Compliant with 10GBase-SR/SW (TN-XFP-SR Module Only)
- Compliant with 10G Fiber Channel 1200-MX-SN-I (TN-XFP-SR Module Only)
- Compliant with 10GBase-LR/LW/ER/ZR (TN-XFP-LRx & TN-XFP-ER & TN-XFP-ZR Only)
- Compliant with 10G Fiber Channel 1200-SM-LL-L (TN-XFP-LRx & TN-XFP-ER & TN-XFP-ZR Only)
- Compliant with XFI 10G Serial Electrical Interface (TN-XFP-LRx & TN-XFP-ER & TN-XFP-ZR Only)

## Specifications

Standards	IEEE 802.3ae
Output Wavelength	-5.5nm < $\lambda_c$ < +7.5nm
Dimensions	Width: 0.71" [18 mm] Depth: 3.07" [78 mm] Height: 0.33" [8 mm]
Power Consumption	0.66 Watts
Power Input	3.3V
Environment	Operating: 0°C to 70°C (TN-XFP-SR, TN-XFP-ZR) Operating: -5°C to 70°C (TN-XFP-LR1, TN-XFP-ER) Humidity: 10% to 90% (non-condensing)
Compliance	IEC-60825, FDA 21, CFR 1040.10 and 1040.11
Warranty	Lifetime

Note: Per Cisco Systems' literature, the Cisco switches with XFP slots do not accept modules other than Cisco's own XFPs. The Cisco switch identifies the manufacturer ID along with the part number and blocks operations to this port for non-Cisco interfaces. Other major XFP switch manufacturers do not indicate in their literature that such restrictions are imposed.

Transition Networks' XFP units fully comply with Multi-Sourcing Agreement (MSA). This compliance allows Transition Networks' XFP modules to be used on other MSA-compliant XFP platforms without any problems.

## Ordering Information

### Duplex

#### TN-XFP-SR

10GBase-SR/SW/10G Fiber Channel, XFP with DMI 850nm multimode (LC)  
[62.5/125  $\mu$ m (OM1): 33 m/108 ft.]  
[50/125  $\mu$ m (OM2): 82 m/269 ft.]  
[50/125  $\mu$ m (OM3): 300 m/985 ft.]  
Modal dispersion: 3.9 dB

#### TN-XFP-LR1

10GBase-LR/LW/10G Fiber Channel, XFP with DMI 1310nm single mode (LC)  
[10 km/6.2 mi.] Link Budget: 6.2 dB

#### TN-XFP-ER

10GBase-LR/ER/10G Fiber Channel, XFP with DMI 1310nm single mode (LC)  
[40 km/24.9 mi.] Link Budget: 16.5 dB

#### TN-XFP-ZR

10GBase-ZR/10G Fiber Channel, XFP with DMI 1550nm single mode (LC)  
[80 km/49.7 mi.] Link Budget: 23.0 dB

#### TN-XFP-LR10

10GBase-LR/10G Fiber Channel, XFP with DMI single mode 1550nm (LC)  
[100 km/62.1 mi.] Link Budget: 25.0 dB

#### TN-XFP-LRM

10GBase-LRM, XFP with DMI 1310nm multimode (LC)  
[300m/985 ft.] Link Budget: 4.5 dB