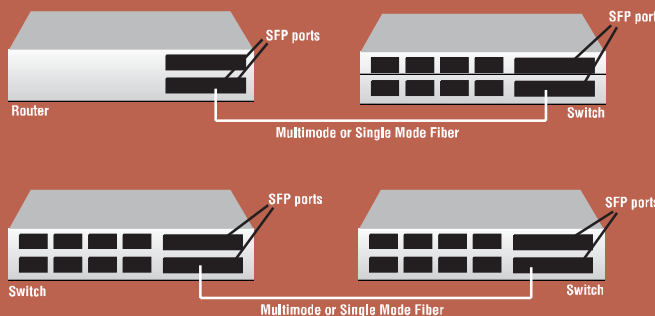


TN-SFP-xxx



- ▶ Hot-Pluggable SFP Footprint Duplex LC Optical Transceiver
- ▶ Digital Diagnostic Function
- ▶ Class 1 Laser International Safety Standard IEC-60825 Compliant
- ▶ Compatible with Small Form Factor Pluggable Multi-Sourcing Agreement (MSA)

Fiber Connections with SFPs



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

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

Applications

- ▶ Gigabit Ethernet Switches and Routers
- ▶ Fibre Channel Switch Infrastructure
- ▶ XDSL Applications
- ▶ Metro Edge Switching

Additional Features

TN-SFP-SX or -LXx SFP modules:

- ▶ Compliant with IEEE 802.3z Gigabit Ethernet
- ▶ Compliant with Fiber Channel 1X SM-LC-L FC-PI

TN-SFP-OC3x SFP modules:

- ▶ Compliant with 100BASE-FX
- ▶ Compliant with Intermediate-Reach SONET OC-3 / SDH STM-1 (S-1.1)

TN-SFP-OC12x SFP modules:

- ▶ Compliant with Intermediate-Reach SONET OC-12 / SDH STM-4 (S-4.1)

TN-SFP-FC2Xx SFP modules:

- ▶ Compliant with IEEE 802.3z Gigabit Ethernet
- ▶ Compliant with Fiber Channel 1X/2X SM-LC-L FC-PI
- ▶ Compliant with Short-Reach SONET OC-48 / SDH STM-16 (S-16.1)

Can be used on Optical Line Converter xFMFF4040-100

CWDM wavelengths available upon request. Please contact Transition Networks.

*Link distance at 1000BASE-SX and Fibre Channel 1x: 220m/722 ft using 62.5/125um MMF 550m/1804 ft using 50/125um MMF

*Link distance at Fibre Channel 2x/OC-48/STM-16: 150m/492 ft using 62.5/125um MMF 300m/984 ft using 50/125um MMF

Specifications

See pages 188 – 200 for complete fiber optic connector specs.

Standards	IEEE 802.3 2003; ANSI X3.297-1997	
Dimensions	Width: 0.52" [13 mm] Depth: 2.18" [55 mm] Height: 0.33" [8 mm]	
Power	3.3V	
Power Consumption	0.66 watts	
Environment	TN-SFP-SX TN-SFP-LX1 TN-SFP-OC3S3 TN-SFP-ELX1 TN-SFP-FC2XS2: -10°C – 85°C	TN-SFP-SXD TN-SFP-ESX5 TN-SFP-ESX6 TN-SFP-FC2XM
	TN-SFP-LX3 TN-SFP-LX8 TN-SFP-OCx TN-SFP-FC2XS40	TN-SFP-LX5 TN-SFP-LX12 TN-SFP-LX16 TN-SFP-FC2XS15: 0°C – 70°C
Compliance	IEC-60825; FDA 21; CFR 1040.10 and 1040.11	
Warranty	Lifetime	

Ordering Info

See pages 188 – 200 for complete fiber optic connector specs.

- TN-SFP-OC3M**
100BASE-FX/OC-3
1300nm MM (LC)
[2 km/1.2 mi.] Link Budget: 11.0 dB
- TN-SFP-OC3S**
100BASE-FX/OC-3
1310nm SM (LC)
[20 km/12.4 mi.] Link Budget: 17.0 dB
- TN-SFP-OC3S3**
100BASE-FX/OC-3 1310nm SM (LC)
[30 km/18.6 mi.] Link Budget: 20.0 dB
- TN-SFP-OC3S8**
100BASE-FX/OC-3 1550nm SM (LC)
[80 km/49.7 mi.] Link Budget: 34.0 dB
- TN-SFP-OC12M**
OC-12/STM-4 SFP 1300nm MM (LC)
[1 km/0.6 miles] Link Budget: 7.0 dB
- TN-SFP-OC12S**
OC-12/STM-4 SFP 1310nm SM (LC)
[20 km/12.4 mi.] Link Budget: 14.0 dB
- TN-SFP-SX (model without DMI)**
TN-SFP-SXD (model with DMI)
1000BASE-SX 850nm MM (LC)
[62.5/125µm: 220 m/722 ft.]
Link Budget: 8.0 dB
[50/125µm: 550 m/1804 ft.]
Link Budget: 8.0 dB
- TN-SFP-ESX5**
1000BASE-SX 1300nm Ext. MM (LC)
[50/125µm fiber only:
up to 2 km/1.2 mi.] Link Budget: 8.0 dB
- TN-SFP-ESX6**
1000BASE-SX 1300nm Ext. MM (LC)
[62.5/125µm fiber only:
up to 2 km/1.2 mi.] Link Budget: 8.0 dB
- TN-SFP-LX1 (model with DMI)**
TN-SFP-ELX1 (model without DMI)
1000BASE-LX 1310nm (LC) SM
[10 km/6.2 mi.] Link Budget: 11.5 dB
- TN-SFP-LX3**
1000BASE-LX 1310nm (LC) SM
[30 km/18.6 mi.] Link Budget: 19.0 dB
- TN-SFP-LX5**
1000BASE-LX 1550nm (LC) SM
[50 km/31.1 mi.] Link Budget: 19.0 dB
- TN-SFP-LX8**
1000BASE-LX 1550nm (LC) SM
[80 km/49.7 mi.] Link Budget: 24.0 dB
- TN-SFP-LX12**
1000BASE-LX 1550nm (LC) SM
[120 km/74.6 mi.] Link Budget: 32.0 dB
- TN-SFP-LX16**
1000BASE-LX 1550nm (LC) SM
[160 km/99.4 mi.] Link Budget: 37.0 dB
- TN-SFP-FC2XM**
OC-48/STM-16/Fibre Channel
1x/2x/1000BASE-SX 850nm (LC) MM
[62.5/125µm: 150 m/492 ft.]*
Link Budget: 6.0 dB
[50/125µm: 300 m/984 ft.]*
Link Budget: 6.0 dB
- TN-SFP-FC2XS2**
Fibre Channel 2x/1x / OC-48 / STM-16/
1000BASE-LX 1310nm SM (LC)
[2 km/1.2 miles] Link Budget: 8.5 dB
- TN-SFP-FC2XS15**
Fibre Channel 2x/1x / OC-48 / STM-16/
1000BASE-LX 1310nm SM (LC)
[15 km/9.3 mi.] Link Budget: 13.0 dB
- TN-SFP-FC2XS40**
Fibre Channel 2x/1x / OC-48 / STM-16/
1000BASE-LX 1310nm SM (LC)
[40 km/24.9 mi.] Link Budget: 26.0 dB