

TN-SFP-xxx

SFP Modules



Features

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

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

Can be used on Optical Line Converter xFMFF4040-100

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-TX:

- ▶ Compliant with IEEE802.3u Fast Ethernet

TN-SFP-T-MG:

- ▶ Compliant with IEEE 802.3:2002
- ▶ 10/100/1000BASE-T operation in host system with SGMII interface
- ▶ Compatible with 1000BASE-T auto-negotiation
- ▶ AutoCross™

Applications

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

Specifications

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-SXD TN-SFP-LX1 TN-SFP-ESX5 TN-SFP-ESX6 TN-SFP-OC3S3 TN-SFP-ELX1 TN-SFP-FC2XM TN-SFP-FC2XS2: -10°C – 85°C TN-SFP-LX3 TN-SFP-LX5 TN-SFP-LX8 TN-SFP-LX12 TN-SFP-LX16 TN-SFP-LX8 TN-SFP-LX12 TN-SFP-LX16 TN-SFP-OCx TN-SFP-FC2XS40 TN-SFP-FC2XS15 TN-SFP-TX TN-SFP-T-MG: 0°C – 70°C
Compliance	IEC-60825; FDA 21; CFR 1040.10 and 1040.11
Warranty	Lifetime

*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.

Ordering Info

TN-SFP-OC3M 100BASE-FX/OC-3 1300 nm MM (LC) [2 km/1.2 mi.] Link Budget: 11.0 dB
TN-SFP-OC3S 100BASE-FX/OC-3 1310 nm SM (LC) [20 km/12.4 mi.] Link Budget: 17.0 dB
TN-SFP-OC3S3 100BASE-FX/OC-3 1310 nm SM (LC) [30 km/18.6 mi.] Link Budget: 20.0 dB
TN-SFP-OC3S8 100BASE-FX/OC-3 1550 nm SM (LC) [80 km/49.7 mi.] Link Budget: 34.0 dB
TN-SFP-OC12M OC-12/STM-4 SFP 1300 nm MM (LC) [1 km/0.6 mi.] Link Budget: 7.0 dB
TN-SFP-OC12S OC-12/STM-4 SFP 1310 nm SM (LC) [20 km/12.4 mi.] Link Budget: 14.0 dB
TN-SFP-OC12S8 OC-12/STM-4 SFP 1310 nm SM (LC) [80 km/49.7 mi.] Link Budget: 29.0 dB
TN-SFP-SX (model without DMI) TN-SFP-SXD (model with DMI) 1000BASE-SX 850 nm MM (LC) [62.5/125 µm: 220 m/722 ft.] Link Budget: 8.0 dB [50/125 µm: 550 m/1804 ft.] Link Budget: 8.0 dB
TN-SFP-ESX5 1000BASE-SX 1300 nm Ext. MM (LC) [50/125 µm fiber only: up to 2 km/1.2 mi.] Link Budget: 8.0 dB
TN-SFP-ESX6 1000BASE-SX 1300 nm Ext. MM (LC) [62.5/125 µm fiber only: up to 2 km/1.2 mi.] Link Budget: 8.0 dB
TN-SFP-FC4XM Fiber Channel 1x/2x/4x/1000BASE-SX 850 nm (LC) MM [62.5/125 µm: 70m/246 ft.] [50/125 µm: 150m/492 ft.] Link Budget: 6.0 dB

TN-SFP-LX1 (model with DMI) TN-SFP-ELX1 (model without DMI) 1000BASE-LX 1310 nm (LC) SM [10 km/6.2 mi.] Link Budget: 11.5 dB
TN-SFP-LX3 1000BASE-LX 1310 nm (LC) SM [30 km/18.6 mi.] Link Budget: 19.0 dB
TN-SFP-LX5 1000BASE-LX 1550 nm (LC) SM [50 km/31.1 mi.] Link Budget: 19.0 dB
TN-SFP-LX8 1000BASE-LX 1550 nm (LC) SM [80 km/49.7 mi.] Link Budget: 24.0 dB
TN-SFP-LX12 1000BASE-LX 1550 nm (LC) SM [120 km/74.6 mi.] Link Budget: 32.0 dB
TN-SFP-LX16 1000BASE-LX 1550 nm (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 850 nm (LC) MM [62.5/125 µm: 150 m/492 ft.]* Link Budget: 6.0 dB [50/125 µm: 300 m/984 ft.]* Link Budget: 6.0 dB
TN-SFP-FC2XS2 Fibre Channel 2x/1x/OC-48/STM-16/ 1000BASE-LX 1310 nm SM (LC) [2 km/1.2 mi.] Link Budget: 8.5 dB
TN-SFP-FC2XS15 Fibre Channel 2x/1x/OC-48/STM-16/ 1000BASE-LX 1310 nm 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 1310 nm SM (LC) [40 km/24.9 mi.] Link Budget: 26.0 dB
TN-SFP-TX 100BASE-TX (RJ-45) [100 m/328 ft.]
TN-SFP-T-MG 10/100/1000BASE-T (RJ-45) [100 m/328 ft.]
Extended Operating Temperature: -40°C to +85°C
TN-SFP-LX1T 1000BASE-LX 1310 nm SM (LC) [10 km/6.2 mi.] Link Budget: 11.5 dB