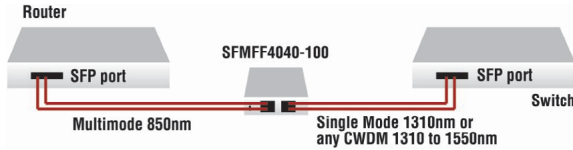


Optical Line Converter with SFP slots

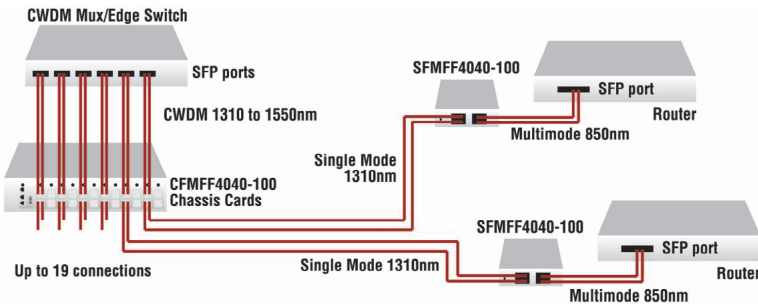
Stand Alone Small Form Factor Pluggable Conversion

SFMFF4040-100

Enterprise Application



Service Provider Application



Optical Line Converter offers protocol transparent connectivity between fiber optical links with an added flexibility of Small Form Factor Pluggable (SFP) technology. xFMFF4040-100 is a universal platform to accommodate any optical conversion options available via SFP interfaces.

These converters offer an excellent upgrade path for the networks. Today's Fast Ethernet applications can be upgraded to Gigabit speeds tomorrow with a simple SFP swap. The converter remains installed, managed and fully operational at any of these speeds.

Two SFP module slots allow for seamless connectivity between different wavelengths or fiber modes for speeds up to 1Gbps. Protocol independence allows for use in broad range of applications including Fast and Gigabit Ethernet, FDDI, ESCON, SONET OC-3, OC-12, OC-24 and Fibre Channel.

Features

- ▶ Two SFP Slots for SFP interfaces
- ▶ Preconfigured bundles with SFP modules installed.
- ▶ CWDM and DWDM SFP-ready platform
- ▶ Link Pass Through *see next page*
- ▶ Protocol Transparency
- ▶ Automatic Link Restoration *see next page*

Specifications

Standards	Multi-Source Agreement (MSA): Small Form Factor Pluggable (SFP)	Environment	SFMFF4040-100 Board: -10 – 60°C operating temp; See SFP Module temperature ratings; 5% to 95% humidity (non-condensing); 0 – 10,000 feet
LEDs	LK1: Link on Port 1 LK2: Link on Port 2 PWR: Power	Safety Compliance	Wall Mount Power Supply: UL approved and CSA certified
Dimensions	Width: 3.25" [83 mm] Depth: 4.8" [122 mm] Height: 1.0" [25 mm]	Regulatory Compliance	FCC Class A; EN55024 (CISPR 22) Class A; ICES-003; CISPRB; CE Mark
Power Consumption	2 watts with TN-SFP-xx modules installed	Warranty	Lifetime
Power	External AC/DC required; 12 VDC 0.5A		



Optical Line Conversion

Ordering Info

Product Number	Port One	Port Two
<i>Pre-configured bundles:</i>		
SFMFF4040-100	SFP Slot (empty)	SFP Slot (empty)
SFMFF1314-120	Gigabit Ethernet/Fibre Channel 1000BASE-SX 850nm multimode (SC) [62.5/125µm fiber: 220 m / 722 ft.] [50/125µm fiber: 550 m / 1804 ft.]	Gigabit Ethernet/Fibre Channel 1000BASE-LX 1310nm single mode (SC) [10 km / 6.2 miles]
SFMFF1314-110	OC-12/STM-4 SFP 1300nm multimode (SC) [1 km / 0.6 miles]	OC-12/STM-4 SFP 1310nm single mode (SC) [20 km / 12.4 miles]
SFMFF1314-100	SFP 100BASE-FX/OC-3 1300nm multimode (SC) [2 km / 1.2 miles]	SFP 100BASE-FX/OC-3 1310nm single mode (SC) [20 km / 12.4 miles]

Compatible Transition Networks SFP Modules:

Product Number	Description
TN-SFP-OC3M	SFP 100BASE-FX/OC-3 1300nm multimode (SC) [2 km / 1.2 miles]
TN-SFP-OC3S	SFP 100BASE-FX/OC-3 1310nm single mode (SC) [20 km/12.4 miles]
TN-SFP-OC12M	OC-12/STM-4 SFP 1300nm multimode (SC) [1 km / 0.6 miles]
TN-SFP-OC12S	OC-12/STM-4 SFP 1310nm single mode (SC) [20 km / 12.4 miles]
TN-SFP-SX	1000BASE-SX/Fibre Channel 850nm multimode (LC) [62.5/125µm fiber: 220 m / 722 ft.] [50/125µm fiber: 550 m / 1804 ft.]
TN-SFP-LX1	1000BASE-LX/Fibre Channel 1310nm single mode(LC) [10 km/6.2 miles]
TN-SFP-LX3	1000BASE-LX/Fibre Channel 1310nm single mode (LC) [30 km/18.6 miles]
TN-SFP-LX5	1000BASE-LX/Fibre Channel 1550nm single mode (LC) [50 km/31.1 miles]
TN-SFP-LX8	1000BASE-LX/Fibre Channel 1550nm single mode (LC) [80 km/49.7 miles]

CWDM wavelengths available upon request. Please contact Transition Networks.

ADVANCED PRODUCT FEATURES & CERTIFICATION

▶ Automatic Link Restoration

Transition Networks's converters will automatically re-establish link in all network conditions.

▶ No need to reset devices

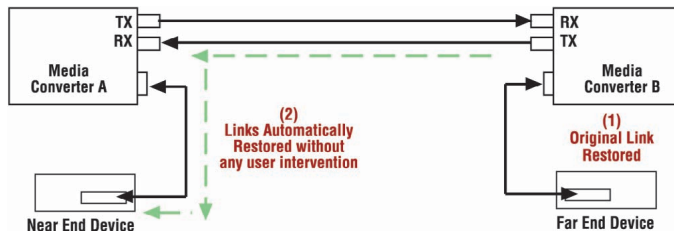
Transition Networks's converters will automatically re-establish link when connected to switches if link was lost. With other manufacturers' converters the user must reset the converter to re-establish the link.

▶ Auto-Negotiation Enabled

Automatic Link Restoration allows the users to continue using Auto-Negotiation with Link Loss Notification features. With other manufacturers' converters the user must disable Auto-Negotiation and hard set the link.

▶ Link Pass Through Activated in both directions

Automatic Link Restoration on Transition Networks's products allows users to continue using Link Loss Notification feature activated in both directions. Many competitive solutions allow for Link Loss Notification activation only in one direction. If Link Loss feature is activated in both directions, competitive products are put in a "deadly embrace" and they cannot restore the link without resetting the converters.

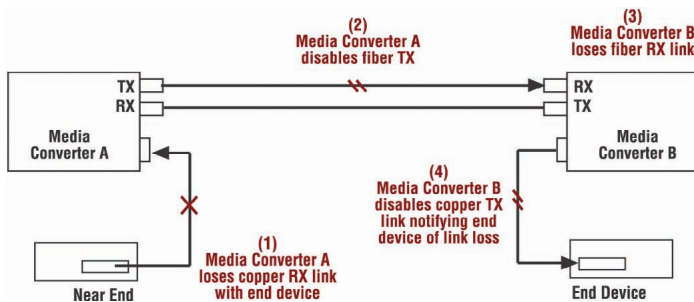


▶ Link Pass Through

Link Pass Through is a troubleshooting feature that allows the media converter to monitor both the fiber and copper RX ports for loss of signal. In the event of a loss of RX signal on one media port, the converter will automatically disable the TX signal of the other media port, thus "passing through" the link loss. (see diagram below)

▶ End device automatically notified of link loss

▶ Prevents loss of valuable data unknowingly transmitted over invalid link



If someone tells you media conversion is a commodity product that anyone can bring to market, they probably haven't looked at the extensive product suite offered by Transition Networks. With the industry's most comprehensive offering of full-featured products, Transition's media converters stand out as "the choice" among industry IT professionals.

Generally, media converters are low-level OSI model devices with no IP or MAC addresses and therefore are transparent to the network. This "transparency" makes them very inexpensive and easy to use, but also can make troubleshooting the network very difficult. In an effort to overcome this difficulty and to make media converters "visible" to network managers, Transition has designed their full-featured products to include the most advanced features on the market today.