OC12 ATM / SONET / SDH

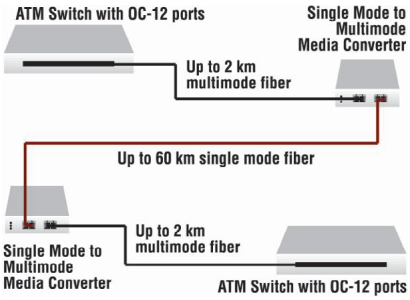
Single Mode to Multimode Fiber

Stand-Alone Media Converters

F-SM-MM-06(xx) & SFMFF131x-210

Convert Single Mode to Multimode

Extend Network Distance



Extend Network Distance

Convert multimode 622 Mbps interfaces to single mode fiber on a port-by-port basis and extend ATM or SONET over single mode fiber up to 60 km.

Use this converter to extend the reach of an ATM switch with a multimode port up to 60 km across single mode fiber.

Reduce the cost of an ATM/SONET deployment by purchasing ATM/SONET devices with lower cost multimode fiber interfaces and use a media converter to introduce single mode fiber ports only where you need them.

Features

- Link Pass Through *see next page*
- Automatic Link Restoration *next page*
- Protocol Transparency

Ordering Info

Product Number	Port One	Port Two
F-SM-MM-06	622 Mbps fiber optic 1300nm multimode (SC) [2 km/1.2 miles]	622 Mbps fiber optic 1310nm single mode (SC) [15 km/9.3 miles]
F-SM-MM-06(XL)	622 Mbps fiber optic 1300nm multimode (SC) [2 km/1.2 miles]	622 Mbps fiber optic 1310nm single mode (SC) [40 km/24.9 miles]
SFMFF1316-210	622 Mbps fiber optic 1300nm multimode (SC) [2 km/1.2 miles]	622 Mbps fiber optic 1310nm single mode (SC) [40 km/24.9 miles]
SFMFF1317-210	622 Mbps fiber optic 1300nm multimode (SC) [2 km/1.2 miles]	622 Mbps 1550nm single mode (SC) [60 k /37.3 miles]

Optional Accessories *(sold separately)*

Product Number	Description
F-SM-MM-06(xx):	
SPS-1872-CC	Wide Input (18-72VDC) Piggy Back Power Supply
WMBD-FS	DIN Rail Mount Bracket (flat, small) 3.1" [79 mm]
SFMFF131x-210:	
SPS-1872-PS	Wide Input (18-72VDC) Piggy Back Power Supply
WMBD-F	DIN Rail Mount Bracket (flat) 3.3" [109 mm]
F-SM-MM-06(xx) or SFMFF131x-210:	
SPS-1872-SA	Wide Input (18-72VDC) Stand-Alone Power Supply
WMBD	DIN Rail Mount Bracket 5.0" [127 mm]
WMBL	Wall Mount Bracket 4.0" [102 mm]
WMBV	Vertical Wall Mount Bracket 5.0" [127 mm]

Specifications

Standards	ANSI T1.646, ITU G.957
Fiber Optic Connector Specs	
Multimode	Min TX PWR: -19.0 dBm Max TX PWR: -14.0 dBm RX Sensitivity: -26.0 dBm Max In PWR: -14.0 dBm Link Budget: 7.0 dB
Single Mode	
F-SM-MM-06	Min TX PWR: -15.0 dBm Max TX PWR: -8.0 dBm RX Sensitivity: -28.0 dBm Max In PWR: -7.0 dBm Link Budget: 13.0 dB
F-SM-MM-06(XL) & SFMFF1316-210	Min TX PWR: -3.0 dBm Max TX PWR: +2.0 dBm RX Sensitivity: -29.0 dBm Max In PWR: -7.0 dBm Link Budget: 26.0 dB
SFMFF1317-210	Min TX PWR: -3.0 dBm Max TX PWR: +2.0 dBm RX Sensitivity: -28.0 dBm Max In PWR: -7.0 dBm Link Budget: 25.0 dB
Status LEDs	Power: Lit for normal operation MMF: Lit for active SMF: Lit for active
Dimensions	Width: 3.0" [76 mm] Depth: 4.7" [119 mm] Height: 1.0" [25 mm]
Power	External AC/DC required; 12V DC. .5A; unregulated; standard
Power Consumption	3.1 watts
Environment	0 – 50°C, 5% – 90% humidity (non-condensing), 0 – 10,000 feet
Shipping Weight	2 lbs. [0.9 kg]
Safety Compliance	Wall Mount Power Supply: UL approved and CSA certified
Regulatory Compliance	CE Mark F-SM-MM-06: CISPR/EN55022 Class A; FCC Class A SFMFF131x-210: CISPR/EN55022 Class A&B; FCC Class A&B
Warranty	Lifetime

TRANSITION networks®

The Conversion Technology Experts

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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

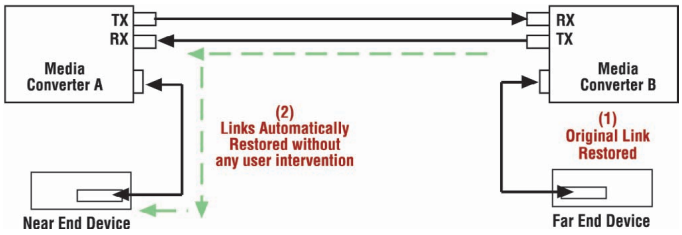
Transition Networks's converters will automatically re-establish link when connected to switches if link was lost. With other manufacturers' converters the user must reset the converter to re-establish the link.

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

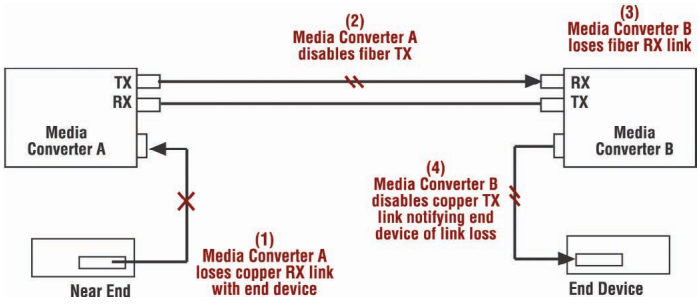
Automatic Link Restoration on Transition Networks's products allows users to continue using Link Loss Notification feature activated in both directions. Many competitive solutions allow for Link Loss Notification activation only in one direction. If Link Loss feature is activated in both directions, 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.

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