

10/100BASE-SX Media Converter

▶ Lowest possible cost solution for fiber installation up to 60 meters (100BASE-SX)

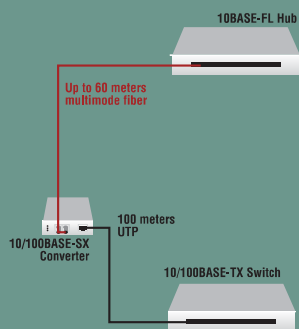
▶ Ideal for building backbone and horizontal cabling applications where cost and 10/100 auto-negotiation are critical.

SSETF101x-205▶ **Extend Network Distance**

Used in pairs, this media converter can extend distances between two twisted pair switches or a switch and a server up to 60 meters over multimode fiber (100BASE-SX).

▶ **Connect Remote Devices**

Using a single 10/100BASE-SX media converter, a switch with a copper port can be connected to a switch or any other 10/100BASE-SX compliant device with an existing fiber interface.

Extend Network Distance**Features**

▶ **Auto-Negotiation** *see next pages*

▶ **AutoCross™** *see next pages*

▶ **Link Pass Through** *see next pages*

▶ **Efficient and Reliable**

The 10/100 SX Media Converter operates easily under heavy traffic loads without generating excess heat; meaning a failure-prone internal fan is unnecessary.

▶ **Automatic Link Restoration** *see next pages*

Specifications

Operation	Operates as TIA SP4360A Type I, II device
Standards	IEEE Std. 802.3™; 100BASE-TX, 10BASE-FL, Draft TIA 100BASE-SX-SP-4360A

Recommended Optic Cable 62.5/125 μ m multimode fiber; 50/125 μ m multimode fiber

Optional Optic Cable 100/140 μ m multimode fiber; 85/125 μ m multimode fiber

Fiber Optic Connector Specs

SKU	Min TX PWR (dBm)	Max TX PWR (dBm)	RX Sens (dBm)	Max In PWR (dBm)	Link Budget (dB)
SSETF1011-205	-19.0	-14.0	-32.5	-14.0	13.5
SSETF1013-205	-19.0	-14.0	-32.5	-14.0	13.5

Status LEDs

PWR (Power): ON = Connection to the external AC or DC power
SX-ACT (Fiber Activity): Flashing = Data reception on the fiber link
SX-100 (Fiber Speed): ON = Fiber link at 100 Mb/s
SX-10 (Fiber Speed): ON = Fiber link at 10 Mb/s
TX-ACT (Copper Activity): Flashing = Data reception on the copper link
TX-100 (Copper Speed): ON = Copper link at 100 Mb/s
TX-10 (Copper Speed): ON = Copper link at 10 Mb/s

Dimensions **Width:** 3.25" [82 mm]
Depth: 4.8" [122 mm]
Height: 1.0" [25 mm]

Power External AC/DC required; 12V DC. 0.5A; unregulated; standard

Environment 0 – 50° C; 5% – 90% humidity non-condensing; 0 – 10,000 feet altitude

Shipping Weight 2 lbs. [0.90 kg]

Safety Compliance **Wall Mount Power Supply:** UL listed and CSA certified

Regulatory Compliance FCC Class A, CISPR/EN55022 Class A, CE Mark

Warranty Lifetime

Ordering Info**SSETF1011-205**

10/100BASE-TX (RJ-45) [100 m/328 ft.]
 10/100BASE-SX 850nm multimode (ST)
 [60 m/197 ft.]

SSETF1013-205

10/100BASE-TX (RJ-45) [100 m/328 ft.]
 10/100BASE-SX 850nm multimode (SC)
 [60 m/197 ft.]

Optional Accessories

(sold separately)

Wide Input (18 – 72VDC) Power Supplies:**SPS-1872-PS**

Piggy Back Power Supply

SPS-1872-SA

Stand-Alone Power Supply

Mounting Options:**E-MCR-04**

12-slot Media Converter Rack

WMBD

DIN Rail Bracket 5.0" [127 mm]

WMBD-E

DIN Rail Bracket (extended) 4.3" [109 mm]

WMBD-F

DIN Rail Bracket (flat) 3.3" [84 mm]

WMBL

Wall Mount Bracket 4.0" [102 mm]

WMBV

Vertical Wall Mount Bracket 5.0" [127 mm]

WMBV-E

Vertical Wall Mount Bracket (extended) 4.7" [119 mm]



▶ Auto-Negotiation (802.3u)

Auto-Negotiation allows devices to perform automatic configuration to achieve the best possible mode of operation over a link. Devices with this feature will broadcast their speed (10Mbps, 100Mbps, etc.) and duplex (half/full) capabilities to other devices and negotiate the best mode of operation between the two devices.

- ▶ No user intervention required to determine best mode of operation
- ▶ Optimal link established automatically
- ▶ Quick and easy installation

While the inclusion of this feature is beneficial, the ability to disable it is equally beneficial. In the event of a non-negotiating end device trying to connect to a negotiating device, the mode of operation will drop to the least common denominator between the two devices (i.e. 100Mbps, half-duplex). Disabling this feature gives the user the ability to force the connection to the best mode of operation when trying to link with a non-negotiating device. Most Transition converters with Auto-Negotiation will allow you to disable this feature.

▶ AutoCross™

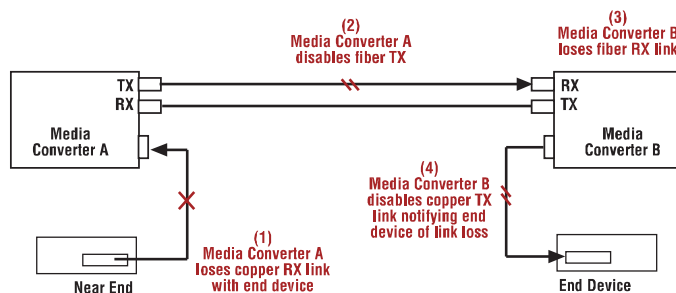
Automatically detects and configures the twisted pair port on the converter to the correct MDI or MDI-X configuration.

- ▶ Eliminates an entire category of troubleshooting
- ▶ No need to identify cable type—straight-through or crossover
- ▶ No user intervention required to determine correct button / switch settings

▶ Link Pass Through

Link Pass Through is a troubleshooting feature that prevents media converters from isolating link failures and it allows end devices to be notified in the event of a loss of link. Link Pass Through provides the media converter with the ability to monitor both the fiber and the copper RX ports for a loss of signal. If a loss of RX signal occurs on one media port, the converter will automatically disable the TX signal on the other port. By shutting down the fiber TX port, the link failure is “passed through” to the remote converter and device (see diagram below).

- ▶ End device automatically notified of link loss
- ▶ Prevents loss of valuable data unknowingly transmitted over an 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.



► 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.

