10/100 Bridging Just Convert-IT™ 10/100BASE-TX to 100BASE-FX

10/100 Bridging Media Converter

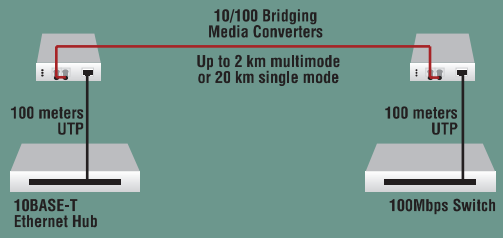
- Unit & Port LEDs allow for quick status information
- Auto-Negotiation
- AutoCross™
- Ability to force 10Mbps or 100Mbps (TP port) and full or half-duplex on both copper and fiber.
- Automatic Link Restoration

J/E-PSW-FX-02(xx)

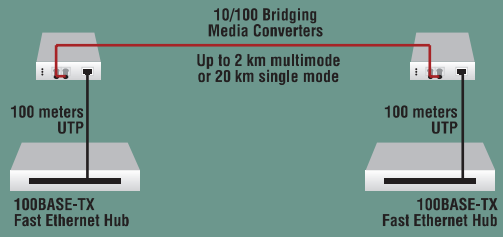
The "Just Convert-It™" Bridging Media Converter is an inexpensive, no frills way to extend the distance between connections with different speeds or duplex using fiber optic cable, while maintaining the same quality and reliability found on Transition's full-featured line of products.

10/100 Bridging

Connect Legacy Networking Equipment
Connect an existing 10Mbps device to 100Mbps devices.



Eliminate Collision Domains
Connect two half-duplex hubs with a full-duplex connection over fiber containing no collisions.



Specifications

Standards	IEEE Std. 802.3™, IEEE Std. 802.3ab™

Fiber Optic Connector Specs

SKU	Min TX PWR (dBm)	Max TX PWR (dBm)	RX Sens (dBm)	Max In PWR (dBm)	Link Budget (dB)
J/E-PSW-FX-02	-19.0	-14.0	-30.0	-14.0	11.0
J/E-PSW-FX-02(SC)	-19.0	-14.0	-30.0	-14.0	11.0
J/E-PSW-FX-02(SM)	-15.0	-8.0	-31.0	-8.0	16.0
J/E-PSW-FX-02(100)	-13.0	-6.0	-32.0	-3.0	19.0
J/E-PSW-FX-02(101)	-13.0	-6.0	-32.0	-3.0	19.0

Switches	**SW1:** Auto-Negotiation (UP = enable) **SW2:** Full/Half Duplex (Copper) (UP = full-duplex) **SW3:** Force Speed (Copper) (UP = 100Mbps) **SW4:** Full/Half Duplex (Fiber) (UP = full-duplex)
Dimensions	**Width:** 3.0" [76 mm] **Depth:** 3.9" [100 mm] **Height:** 1.0" [25 mm]
Status LEDs	**PWR:** Lit for normal operation **LNK Act (fiber):** Steady = Link; Flashing = Rx Data **FD (fiber duplex):** On = Full duplex **LNK Act (copper):** Steady = Link; Flashing = Rx Data **FD (copper duplex):** On = Full duplex **100 (copper speed):** On = 100Mbps
Power	External AC/DC required; +12VDC, 0.5 A min
Power Consumption	2.5 watts
Environment	0 – 50° C operating; 5% – 95% humidity non-condensing; 0 – 10,000 feet altitude
Shipping Weight	2 lbs. [0.90 kg]
Safety Compliance	**Wall Mount Power Supply:** UL Listed, C-UL Listed (Canada)
Regulatory Compliance	FCC Class A, CISPR22/EN55022 Class A, EN55024, CE Mark
Warranty	Lifetime

Ordering Info

J/E-PSW-FX-02
10/100BASE-TX (RJ-45) **[100 m/328 ft.]**
to 100BASE-FX 1300nm multimode (ST)
[2 km/1.2 mi.] Link Budget: 11.0 dB

J/E-PSW-FX-02(SC)
10/100BASE-TX (RJ-45) **[100 m/328 ft.]**
to 100BASE-FX 1300nm multimode (SC)
[2 km/1.2 mi.] Link Budget: 11.0 dB

J/E-PSW-FX-02(SM)
10/100BASE-TX (RJ-45) **[100 m/328 ft.]**
to 100BASE-FX 1310nm SM (SC)
[20 km/12.4 mi.] Link Budget: 16.0 dB

Single Fiber Products
Recommended use in pairs (see page 17)

J/E-PSW-FX-02(100)
10/100BASE-TX (RJ-45) **[100 m/328 ft.]**
to 100BASE-FX 1310nm TX / 1550nm RX single fiber single mode (SC)
[20 km/12.4 mi.] LB: 19.0 dB

J/E-PSW-FX-02(101)
10/100BASE-TX (RJ-45) **[100 m/328 ft.]**
to 100BASE-FX 1550nm TX / 1310nm RX single fiber single mode (SC)
[20 km/12.4 mi.] LB: 19.0 dB

Optional Accessories

(sold separately)

Wide Input (18 – 72VDC) Power Supplies:

SPS-1872-CC
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-FS
DIN Rail Bracket (flat, small) 3.1" [79 mm]

WMBS
Wall Mount Bracket 3.2" [81 mm]

TRANSITION NETWORKS®

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Advanced Product Features

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

Automatic Link Restoration

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

- No need to reset devices

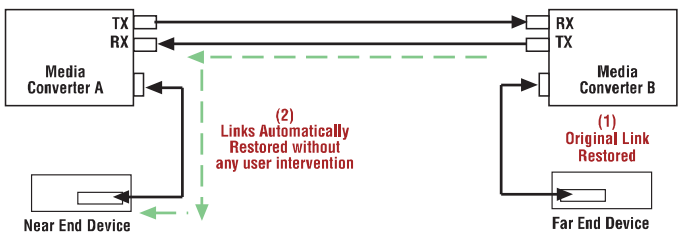
Transition Networks's converters will automatically re-establish link when connected to switches if link was lost. With other manufacturers' converters the user must reset the converter to re-establish the link.

- 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.



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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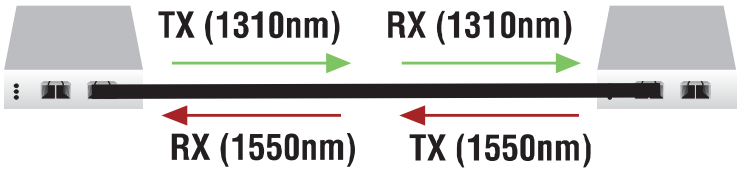
SINGLE FIBER

Single Fiber

Single fiber technology offers a 50% savings in fiber utilization. It is an attractive solution to maximize the usage of a limited number of fiber runs.

In a traditional optical link, a fiber pair consists of two uni-directional strands. The single fiber technology multiplexes two optical wavelengths of 1310nm and 1550nm into a single strand fiber. In a single fiber media converter each wavelength is responsible for either the transmit or receive function. Consequently, the bi-directional transmission is achieved by using a single strand. The converters in a single fiber scenario "match" each other's wavelengths. Converter A transmits at the wavelength of 1310nm and receives at 1550nm while the other converter transmits at 1550nm and receives at 1310nm. Therefore, converters are usually used in pairs.

Single fiber technology is available on all Transition Networks Media Converters in maximum distance ranges from 20 to 80km.



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