Fault-Tolerant Redundant Link Protector

Features

network.

Fault-tolerant redundant connections

- Easy to install and use
- Supports half and full-duplex transmission
- ▶ AutoCross[™] on all 3 ports (see next page)
- Auto-Negotiation (see next) page)
- ▶ IEEE 802.3 compliant
- Nine diagnostic LEDs
- Optional 3-port switch mode

SBFTF1010-130



Ordering Info

SBFTF1010-130 10/100BASE-TX Link Protector Transceiver (3) 10/100BASE-TX (RJ-45) [100 m]

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

RMS19-4S-01 4-slot Media Converter Shelf

WMBD

DIN Rail Bracket 5.0" [127 mm]

WMBL Wall Mount Bracket 4.0" [102 mm]

WMBV

Vertical Wall Mount Bracket 5.0" [127 mm]

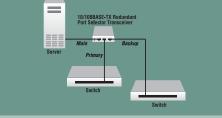
The Redundant Link Protector is a 10/100 Ethernet fault-tolerant transceiver. It significantly reduces network downtime, adding a new level of redundancy to 10/100 Ethernet connections. It also provides a redundant path for critical 10/100 devices. In a 10/100 Ethernet network, a critical device such as a file server may be connected to the rest of the network through a hub or a switch. A common problem in this configuration is that the server is often connected to the network through a single cable. If the cable fails, then the server is disconnected from the rest of the network. Similarly, if a port of a hub or switch to which the server is connected fails, the server is disconnected from the

The Redundant Transceiver has three ports: one for the critical (main) device, one for the default (primary) path for the critical device, and another (backup) for the backup path. It is a smart device that will not send any signal on a path that is not active. If the primary path loses its link, then the transceiver will immediately (in less than one microsecond) switch to the backup path.

When the primary path re-establishes its link, the Redundant Link Protector will automatically switch back to the primary path.

Optional functionality, controlled via a dip switch, allows the unit to move from the fault-tolerant mode to a 3-port switch mode.

Fault-Tolerant Redundant Connections



Standards	IEEE Std. 802.3
RJ-45 Connectors Type: 8-position, RJ- 1: TX+ 2: TX- 3: RX+ 4: NC (no	45 receptacle: 5: NC (no connection) 6: RX- 7: NC (no connection) connection) 8: NC (no connection)
Dip Switches	SW1: Auto-Negotiation Enable/Disable SW2: 10/100Mbps SW3: Full/Half Duplex SW4: Redundancy/Switch
System LEDs	Power (PWR): Indicates the presence of POWER Primary (PRI): Indicates a link is established on the Primary port Backup (BKP): Indicates the link has moved over to the Backup port.
Per Port LEDs	Lower Right: Green indicates 100Mbps; Orange indicates 10Mbps; Flashing indicates Activity Lower Left: Green indicates full-duplex; Off half-duplex
Dimensions	Width: 3.25" [82 mm] Depth: 4.8" [122 mm] Height: 1.0" [25 mm]
Power	Domestic Input: 120 VAC @ 60 Hz. Output: 12 VDC, 0.5 Amp International Input: 100 - 240 VAC @ 50 Hz. Output: 12 VDC, 1.25 Amp
Operating temperatur	re 0 – 50°C (32°F – 122°F)
Storage temperature	-15°C – 65°C (-5°F – 149°F)
Relative humidity	5% - 95%
Altitude	0 – 10,000 ft.
Shipping Weight	2 lbs. [0.90 kg]
Safety Compliance	Wall Mount Power Supply: UL Listed & CSA Certified
Regulatory Compliance	FCC Class A, EN55024, UL 60950, CE Mark
Warranty	Lifetime



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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

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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