# 10/100/1000 Ethernet Media Converter Stand-Alone



The SGFEB provides a cost effective method for integrating 1000Base-SX/LX fiber into a 10/100/1000Base-T copper environment. Deploying fiber into today's networks provides the ability to transmit data over significantly longer distances than is possible on copper. Fiber also protects your data from external sources of noise and interference, improving network performance.



# **Ordering Information**

## SGFEB1040-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 100/1000Base-X SFP Slot (empty)

#### SGFEB1013-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-SX 850nm MM (SC) [62.5/125 um: 220 m/722 ft.] [50/125 um: 550 m/1804 ft.] Link Budget 7.5dB

## SGFEB1039-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-SX 850nm MM (LC) [62.5/125 um: 220 m/722 ft.] [50/125 um: 550 m/1804 ft.] Link Budget 8.0dB

### SGFEB1014-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm SM (SC) [10 km/6.2 mi.] Link Budget 10.5dB

### SGFEB1019-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm SM (LC) [10 km/6.2 mi.] Link Budget 10.5dB

### SGFEB1029-130

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1310nm TX/1550nm RX SM (SC) [20 km/12.4 mi.] Link Budget 13.0dB

## SGFEB1029-131

10/100/1000Base-T (RJ-45) [100 m/328 ft.] to 1000Base-LX 1550nm TX/1310nm RX SM (SC) [20 km/12.4 mi.] Link Budget 13.0dB

## SGFEB1040-230

(1) Port 10/100/1000Base-T (RJ-45) [100 m/328 ft.] to (2) Ports 100/1000Base-X SFP Slot (empty)

## SGFEB1040-330

(2) Port 10/100/1000Base-T (RJ-45) [100 m/328 ft.] to (2) Ports 100/1000Base-X SFP Slot (empty)

Optional Accessories (sold separately)

## SFP Modules

Transition Networks offers a variety for 1000M and 100M Fiber SFP Modules

## DC Power Supply

SPS-2460-SA or SPS-2460-PS: wide input 24 – 60 VDC power supply

## **Mounting options**

E-MCR-05: 12 Slot Powered Media Converter Rack RMS19-SA4-01: 4-Slot Media Converter Shelf

WMBL: Wall Mount Bracket

# WMBD: DIN Rail Mount Bracket

# **Features**

- Auto Negotiation
- AutoCross
- Link Pass Through
- Far End Fault and Remote Fault Detect
- Provides rate conversion while also increasing transmission distances
- Supports multimode or single mode fiber
- Versions available with fixed SC or LC optics, as well as modular SFP optics
- Long haul transmission distances are supported with a variety of SFP modules
- SFP ports support dual speeds: 100/1000/SGMII
- Multiport versions provide 3 or 4 port switch functionality or provide redundant fiber links
- Supports IEEE802.3az Energy Efficient Ethernet

## **Specifications**

Standards	IEEE 802.3, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3z, IEEE 802.3az
Data Rates	Copper:10/100/1000 Mbps Fiber:1000Mbps, 100Mbps also supported via SFP port
Filtering Addresses:	8k MAC Addresses
Max Frame Size:	10,260 byte Jumbo Frames
Status LEDs	PWR (Power): On = Power is provided to converter LACT (Fiber Link/Activity): On = Link, Blink = Activity  RJ-45 Upper Left (TPLink/Activity/Duplex): Green = Link Full Duplex, Blink = Activity, Amber = Link Half Duplex, Blink = Activity  RJ-45 Upper Right (Speed): Green = 1000Mbps, Amber = 100Mbps, Off = 10Mbps
Dip Switches:	Two Port Models  Switch 1: TP1 - Auto-Negotiation Enable / Disable  Switch 2: TP1 - Force 100Mbps or 10Mbps with switch 1 disabled  Switch 3: TP1 - Force Full or Half Duplex with switch 1 disabled  Switch 4: Link Pass Through Enable / Disable Switch 5 & 6: Controls the Fiber SFP port for 1000M, 100M, or SGMII
Additional Dip Switches:	Multiport Models with additional 4 position dip- switch: Switch 1 & 2: Controls the 2nd Fiber SFP port for 1000M, 100M, or SGMII Switch 3 & 4: Fiber Redundancy Enable/Disable, Revertive Mode, and Fiber P2/P3 blocking
Dimensions:	Length: 4.8" (122 mm) Width: 3.25" (82 mm) Height: 1.0" (25 mm
Power:	Input: 7.5 to 24 VDC Provided by wide input AC Wall Mount Adapter
Power consumption	2.2 Watts
Environment:	Operating Temp: 0 C to 50 C (32 F to 122 F) Storage Temp: -15 to +65 C Humidity: 5% - 95%, non-condensing Altitude: 0 - 10,000 ft.
Weight:	Single unit: 0.55 LBs (0.25kg) Shipping weight: 2 lbs. (0.9kg)
Regulatory Compliance:	EN55022 Class A, EN55024, FCC Class A, CE Mark
Safety Compliance:	Wall Mounted Power Supply: UL Listed, UL60950 and CSA Certified
Warranty:	Lifetime