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



SGFEB1040-330

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.

## 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 <br> 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): $\quad 0 n=$ Link, Blink $=$ Activity <br> RJ-45 Upper Left (TPLink/Activity/Duplex): <br> Green $=$ Link Full Duplex, Blink = Activity, <br> Amber $=$ Link Half Duplex, Blink = Activity <br> RJ-45 Upper Right (Speed): Green $=1000 \mathrm{Mbps}$, <br> Amber $=100 \mathrm{Mbps}, 0 \mathrm{ff}=10 \mathrm{Mbps}$ |
| Dip Switches: | Two Port Models <br> Switch 1: TP1 - Auto-Negotiation Enable / Disable <br> Switch 2: TP1 - Force 100Mbps or 10Mbps with <br> switch 1 disabled <br> Switch 3: TP1 - Force Full or Half Duplex with switch 1 disabled <br> Switch 4: Link Pass Through Enable / Disable Switch 5 \& 6: Controls the Fiber SFP port for $1000 \mathrm{M}, 100 \mathrm{M}$, or SGMII |
| Additional Dip Switches: | Multiport Models with additional 4 position dipswitch: <br> Switch 1 \& 2: Controls the 2nd Fiber SFP port for 1000M, 100M, or SGMII <br> Switch 3 \& 4: Fiber Redundancy Enable/Disable, Revertive Mode, and Fiber P2/P3 blocking |
| Dimensions: | Length: 4.8" (122 mm) <br> Width: $3.25^{\prime \prime}(82 \mathrm{~mm})$ <br> Height: 1.0 " $(25 \mathrm{~mm}$ |
| Power: | Input: 7.5 to 24 VDC <br> Provided by wide input AC Wall Mount Adapter |
| Power consumption | 2.2 Watts |
| Environment: | Operating Temp: 0 C to $50 \mathrm{C}(32 \mathrm{~F}$ to 122 F$)$ <br> Storage Temp: -15 to +65 C <br> Humidity: 5\%-95\%, non-condensing <br> Altitude: $0-10,000 \mathrm{ft}$. |
| Weight: | Single unit: $0.55 \mathrm{LBs}(0.25 \mathrm{~kg})$ Shipping weight: 2 lbs . ( 0.9 kg ) |
| 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 |

## 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:
$220 \mathrm{~m} / 722 \mathrm{ft}$.] [50/125 um: $550 \mathrm{~m} / 1804 \mathrm{ft}$.] 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:
$220 \mathrm{~m} / 722 \mathrm{ft}$.] [50/125 um: $550 \mathrm{~m} / 1804 \mathrm{ft}$.] 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 1310 nm 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 1310 nm 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

