

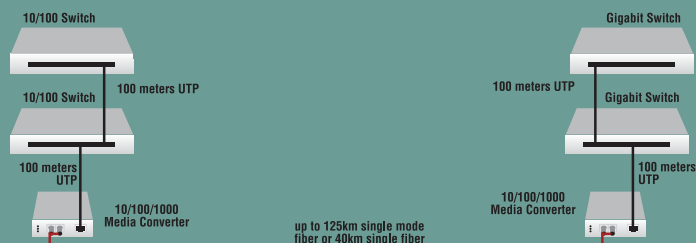
10/100/1000 Ethernet 10/100/1000BASE-T to 1000BASE-X

10/100/1000 Ethernet Media Converter



- ▶ Extend Network Distance
- ▶ Bridge legacy 10/100 devices to a Gigabit backbone

Extend Network Distance



Specifications

Standards	IEEE 802.3™, IEEE 802.3ab, IEEE 802.3u, IEEE 802.3z
Data Rate	Copper: 10/100/1000 Mbps Fiber: 1000 Mbps
Filtering Addresses	8K MAC Addresses
Max Frame Size	802.3ac tagged: 1628 bytes untagged: 1632 bytes

Fiber Optic Connector Specs

Product SKU	Min TX PWR (dBm)	Max TX PWR (dBm)	RX Sensitivity (dBm)	Max In PWR (dBm)	Link Budget (dB)
SGFEB1013-120	-10.0	-4.0	-17.0	0.0	7.0
SGFEB1014-120	-13.0	-3.0	-20.0	-3.0	7.0
SGFEB1015-120	-5.0	0.0	-20.0	-3.0	15.0
SGFEB1017-120	-3.0	2.0	-23.0	-3.0	20.0
SGFEB1024-120	-10.0	-3.0	-17.0	-3.0	7.0
SGFEB1029-120	-8.0	-3.0	-21.0	-3.0	13.0
SGFEB1029-121	-8.0	-3.0	-21.0	-3.0	13.0
SGFEB1029-122	-3.0	2.0	-23.0	-8.0	20.0
SGFEB1029-123	-3.0	2.0	-23.0	-8.0	20.0
SGFEB1029-124	-2.0	3.0	-26.0	-3.0	24.0
SGFEB1029-125	-2.0	3.0	-26.0	-3.0	24.0
SGFEB1035-120	0.0	5.0	-27.0	-3.0	27.0

Status LEDs **PWR:** ON green = Power applied to card
TP (Duplex/Link/Activity): Orange: ON = Half-duplex Link; BLINK = Activity; Green: ON = Full-duplex Link; BLINK = Activity **TP (10Mbps/100Mbps/1000Mbps):** Off = 10Mbps; Orange = 100Mbps; Green = 1000Mbps **LACT (Fiber Link/Activity):** Green: ON = Link; BLINK = Activity

Dip Switches **Switch 1:** TX - Enable/Disable Auto-Negotiation
Switch 2: TX - Force 10Mbps or 100Mbps with Switch 1 off
Switch 3: TX - Force Half or Full duplex with Switch 1 off
Switch 4: Enable/Disable LPT
Switch 5: not used
Switch 6: not used

Jumpers **J6:** TX - Enable/Disable AutoCross

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

Power External AC/DC required: 12V DC, 1.25 A, unregulated, standard

Power Consumption 4.8 watts

Environment 0 – 50°C operating, -40°C - 85°C storage
5% – 95% humidity non-condensing, 0 – 10,000 feet altitude

Shipping Weight 2 lb. [0.9 kg]

Regulatory Compliance CISPR/EN55022 Class A, EN55024, EN61000, FCC Class A, CE Mark

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

Warranty Lifetime

SGFEB10xx-12x



Features

- ▶ Auto-Negotiation (copper and fiber ports)
- ▶ Switch Selectable Speeds (UTP) when Auto-Negotiation is off
- ▶ AutoCross™

- ▶ Link Pass Through
- ▶ Remote Fault Detect
- ▶ Pause

Ordering Info

SGFEB1013-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-SX 850nm multimode (SC) [62.5/125µm: 220 m/722 ft.] [50/125µm: 550 m/1804 ft.] Link Budget: 7.0 dB

SGFEB1024-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1310nm Extended MM (62.5/125 µm fiber only) (SC) [up to 2 km] Link Budget: 7.0 dB

SGFEB1014-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1310nm SM (SC) [10 km/6.2 mi.] Link Budget: 7.0 dB

SGFEB1015-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1310nm SM (SC) [25 km/15.5 mi.] Link Budget: 15.0 dB

SGFEB1017-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1550nm SM (SC) [65 km/40.4 mi.] Link Budget: 20.0 dB

SGFEB1035-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1550nm SM (SC) [125 km/77.7 mi.] Link Budget: 27.0 dB

SGFEB1040-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-X SFP Slot (empty)

Single Fiber Products *Recommended use in pairs*

SGFEB1029-120
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1310nm TX / 1550nm RX single fiber single mode (SC) [20 km/12.4 mi.] Link Budget: 13.0 dB

SGFEB1029-121
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1550nm TX / 1310nm RX single fiber single mode (SC) [20 km/12.4 mi.] Link Budget: 13.0 dB

SGFEB1029-122
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1310nm TX / 1550nm RX single fiber single mode (SC) [40 km/24.9 mi.] Link Budget: 20.0 dB

SGFEB1029-123
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1550nm TX / 1310nm RX single fiber single mode (SC) [40 km/24.9 mi.] Link Budget: 20.0 dB

SGFEB1029-124
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1510nm TX / 1590nm RX single fiber single mode (SC) [80 km/49.6 mi.] Link Budget: 24.0 dB

SGFEB1029-125
10/100/ 1000BASE-T (RJ-45) [100 m] to 1000BASE-LX 1590nm TX / 1510nm RX single fiber single mode (SC) [80 km/49.6 mi.] Link Budget: 24.0 dB

Optional Accessories *(sold separately)*

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

Mounting Options:

E-MCR-04
12-slot Media Converter Rack

WMBD
DIN Rail Mount Bracket 5.0" [127 mm]

WMBL
Wall Mount Bracket 4.0" [102 mm]

RMS19-SA4-01
4-slot Media Converter Shelf



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