CGFEB Series

10/100/1000 Ethernet Media Converter

TRANSITION NETWORKS®

Multiport media converters provide copper to fiber conversion as well as fiber to fiber conversion. These media converters can operate as 3 port switches or as a 2 port devices with fault tolerant fiber redundancy, while supporting a variety of Ethernet network speeds and various cabling medium.

Features

- Auto-Negotiation (copper and fiber ports)
- Switch Selectable Speeds (UTP) when Auto-Negotiation is off
- Auto-MDI/MDIX
- Link Pass Through
- Remote Fault Detect
- Pause
- Automatic Link Restoration
- IEEE 802.1P QoS, IPv4 Tos/Diffserv, IPv6 traffic class
- IEEE 802.1q VLAN tagging and double tagging (Q in Q)
- Field Upgradeable Firmware
- Virtual Cable Test (VCT) on UTP port
- Uni-directional data transmission allows secure traffic forwarding in only one direction via port based VLAN
- Bandwidth Allocation
- DMI, Digital diagnostics per SFF-8472
- RMON Counters for each port

Specifications

Standards	IEEE 802.3 IEEE 802.3ab IEEE 802.3u IEEE 802.3z IEEE 802.3P IEEE 802.3q
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
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 (10 Mbps/100 Mbps/1000 Mbps): Off = 10 Mbps; Orange = 100 Mbps; Green = 1000 Mbps LACT (Fiber Link/Activity): Green: ON = Link; BLINK = Activity
Dip Switches	Switch 1: TX - Enable/Disable Auto-Negotiation Switch 2: TX - Force 10 Mbps or 100 Mbps with Switch 1 off Switch 3: TX - Force Half or Full duplex with Switch 1 off Switch 4: Enable/Disable LPT Switch 5 & 6: not used
Dimensions	Width: 0.86" [22 mm] Depth: 5" [127 mm] Height: 3.4" [86 mm]
Power Consumption	4.8 Watts
Environment	**Environment specs are dependent on the chassis chosen** Operating: 0°C to 50°C Humidity: 5% to 95% (non-condensing) Altitude: 0 – 10,000 ft.
Weight	1 lb. [0.45 kg]
Compliance	CISPR/EN55022 Class A, EN55024, EN61000, FCC Class A, CE Mark
Warranty	Lifetime

Ordering Information

CGFEB1013-120
10/100/1000Base-T (RJ-45) [100 m]
to 1000Base-SX 850nm multimode (SC)
[62.5/125 μm: 220 m/722 ft.]
[50/125 μm: 550 m/1804 ft.]
Link Budget: 7.0 dB

CGFEB1039-120
10/100/1000Base-T (RJ-45) [100 m]
to 1000Base-SX 850nm multimode (LC)
[62.5/125μm: 220 m/722 ft.]
[50/125μm: 550 m/1804 ft.]
Link Budget: 8.0 dB

CGFEB1024-120
10/100/1000Base-T (RJ-45) [100 m]
to 1000Base-SX 1300nm Extended multimode
(62.5/125 μm fiber only) (SC)
[up to 2 km] Link Budget: 7.0 dB

CGFEB1014-120
10/100/1000Base-T (RJ-45) [100 m]
to 1000Base-LX 1310nm single mode (SC)
[10 km/6.2 mi.] Link Budget: 7.0 dB

CGFEB1040-120
10/100/1000Base-T (RJ-45) [100 m]
to 1000Base-X SFP Slot (empty)

Single Fiber Products

CGFEB1029-120
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

CGFEB1029-121
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

Optional Accessories (sold separately)

SFP Modules