



# Mighter Fiber-to-Copper/Copper-to-Fiber Converter

The Mighter MCFC-1000 converter family provides an economical, long-established solution for linking central server/switch clusters to remote network devices. The MCFC-1000 is a low-profile, rack-able chassis with sixteen modular media card slots, two modular power supply bays and auto-sensing AC Power Supplies. Media converter modules provide 10-Megabit Ethernet, through Gigabit Ethernet and One-Gigabit Fibre Channel connections. One set of Fiber-to-Fiber modules support wavelength conversion for one-Mbps through 155 Mbps (OC-3) data rates another set supports Gigabit data rates and a third supports one-Gigabit Fibre Channel. A Multi-rate Transponder module offers protocol agnostic, wavelength conversion from 50 Mbps to 2.7 Gigabits per second. MCFC-1000 converter cards utilize standard multi-mode & single-mode Fiber transceivers as well as Single-Fiber Bi-Directional and CWDM type transceiver types. Several multi-channel Coarse Wavelength Division Multiplexing (CWDM) multiplexer modules enable multiple wavelengths (data channels) to be transported in parallel over a single Fiber Optic link.

## Simple, User-Friendly Installation

Simple configuration - Provides trouble-free installation. Mid-height, 1.7 U chassis aids in thermal management. Stable design, long production hot-swappable converter cards and redundant Power Supplies, provide secure, peace of mind. Just make connections, power-up and forget it!

## Highly Flexible Network Configuration Options

Use CWDM capabilities to transform individual channels into optical VLANs across a common Fiber link. Use Multi-rate transponders or Fiber-to-Fiber cards to add single-mode capability to non-Ethernet protocols. Simply plug in Copper and Fiber connectors to add long-range Links. Easy Expansion!



## Unparalleled Network Integration and Versatility

A wide selection of Fiber Optic connectors, (including CWDM and Single-Fiber Bi-Directional), expand customer access and utilization of existing Fiber installations. Maintains the ROI of the customer's original copper/Fiber investment!





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## TECHNICAL SPECIFICATIONS

### Standards (Depends on Module type):

- IEEE 802.3 : 10BASE-T, 10BASE-2, 10BASE-FL (FOIRL)
- IEEE 802.3u : 100BASE-TX/100BASE-FX
- IEEE 802.3z : 1000BASE-T/1000BASE-X
- IEEE 802.1d: Spanning Tree Protocol
- IEEE 802.1w : Rapid Spanning Tree
- IEEE 802.1q: VLAN Tagging
- IEEE 802.3x: Flow Control

### Converter Interfaces (Depends on Module type):

- Copper Connectors: RJ-45, BNC (50 Ohm RG-58(U) Thinnnet)
- Fiber Connectors: SC, ST, LC, SFP, MT-RJ
- Fiber Types: Standard multi-mode, duplex single-mode, Single-Fiber Bi-Directional single-mode, CWDM

### Mechanical & Environmental:

- Desktop and rack-mountable unit
- Operating temperature: 0°C~50°C

### Fiber Port Conventions:

Last Digit 1 = SC, 2 = ST, 6 = LC, 7 = Single-Fiber Bi-Directional, [SM, S, 3, s/m] = Single-mode, [m/m, 5] = Multi-mode, [L, E] = Extended Range,

A = [Single-Fiber A-unit]: Tx1550 / Rx1310 nm

B = [Single-Fiber B-unit]: Tx1310 / Rx1550 nm

W -XX = CWDM Wavelengths e.g. W-47 > 1470 nm

### Networking – Transparent to:

- Spanning Tree Protocol / Rapid Spanning Tree Protocol
- VLAN (802.1q) VLAN Tagging
- Flow Control (PAUSE Frames)
- Jumbo Frames (9000+ Octets)
- IPv4 & IPv6 Traffic Classes
- Flow Control Commands
- ANSI X3T1 FC-AL (Fibre Channel)
- Compatible with EIA/TIA 568A/B Standards

### Power:

- Hot-Swappable 100 ~ 240 VAC, 50/60 Hz. Auto-Sensing Power input
- One Power Supply installed as standard
- Redundant Power Supply Option

**Temperature:** Operating: 0° C to 50° C  
Storage: -20° C to 70° C

**Humidity:** Operating: 10% to 80% RH  
Storage: 5% to 90% RH

**Emissions:** FCC Part 15 of Class A & CE Approved

**Safety:** EN 60950, UL, CE, CSA, TUV  
RoHS Compliant [Excluding 10 Mbps]  
Class 1 Lasers Conform to US 21-CFR(J), EN 60825-1, UL 1950 and IEC-825

**Dimensions:** Height: 2.8" [ 7.1 cm]  
Length: 11.2" [28.0 cm]  
Width: 17.4" [43.5 cm]

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