

## Fiber Media Converter

# Un-Managed Platform FMC-10/100

## 10/100Base Ethernet Fiber Media Converter



The FMC-10/100 is a 10/100Base Ethernet to 100Base-FX fiber media converter designed for CPE applications when installed in or connection to the FMC-CH08 unmanaged media converter platform or in stand-alone point to point applications. The FMC-10/100 converter supports auto-negotiation on the copper Ethernet side as well as forced mode. With advanced features like LLP (Link Loss Pass-thru), FEF (Far-End Fault), Switch mode (store & forward, 1600 Bytes maximum frame size) or Converter mode (100/Full to 100/Full, low latency, 9K Bytes packet support), this media converter is targeted for customer premises equipment in metro LAN, campus, enterprise and FTTx applications. By offering simple DIP switch settings, this converter can provide complete control over all converter settings including duplex and speed configuration. This media converter is completely transparent to Layer 2 and Layer 3 protocols including IEEE 802.1q, VLAN tag, Q in Q, STP, IPX, IP, etc.

## Features

- Auto-Cross over for MDI/MDIX in TP port
- Supports far end fault (FEF) function
- Auto-Negotiation or Manual mode in TP port
- Supports link fault pass through (LFP) function
- Support LED indicators
- Converter mode with auto-change-forward (Switch) function
- Packet lengths up to 1600 bytes in Switch mode,  
Or the packet length is not limited in Converter mode

## General Specification

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- Complies with IEEE 802.3 10Base-T, 802.3u 100Base-TX and 100Base-FX standards.
- Temperature: 0 - 50° C (Operating);  
0 - 70 ° C (Storage).
- Humidity: 20-80% non-condensing (Operating);  
10-90% (Storage).
- Power: Input: (AC adaptor) 90-250VAC  
24VDC Input, 18-36VDC ;  
48VDC Input, 36-72VDC
- Dimensions: 178.7mm x 251.6mm x 88mm (LxWxH).
- Power Consumption: < 40W (8-slot full load)
- Compliance: FCC part 15, Subpart B, Class A,  
ANSI C63.4:2003  
CE EN55022:2006, Class A  
EN55024:1998+A1:2001+A2:2003  
LVD: EN 60 950-1:2001
- MTBF: 65,000 h (25°C)

## Technical Specifications

### LAN Interface Specification

- One RJ-45 female connector for straight or cross-over connection.
- Supports 10/100Base-T/TX, Full, Half duplex n-way (Auto-Negotiation).
- Supports Full, Half duplex, 10/100 speed manual selections.
- Transmission Packet Rate for 10/100Base-T/TX : 14880 per second  
/148800 per second.
- Copper TP cable 4 pair Cat. 3 or 5 UTP

### Optical Interface Specification

- Transceiver Connector type : ST, SC, WDM
- Wavelength(typical) : multi-mode: 850nm ;  
single-mode(<50 Km): 1310nm/1550nm up to 120Km  
WDM: 1310/1550nm or 1550/1310nm(A/B type) up to 60Km
- Supports Full, Half duplex selections

## Ordering Information

- **FMC-10/100** Un-managed, 10/100Base-T/TX media converter
- **FMC-10/100P** Un-managed, 10/100Base-T/TX media converter  
With PoE support (IEEE 802.3af compatible)
- **FMC-10/100POF** Un-managed, 10/100Base-T/TX media converter  
Plastic fiber operation