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# **CE Mark Warning**

These are class A products. In a domestic environment these products may cause radio interference in which case the user will need to consider adequate preventative methods.

\*\* We Reserve the right to vary descriptions and specifications without notice due to Fibridge's policy of continuous product improvement\*\*

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#### 1. Checklist

The carton should contain the following items:

- Gigabit Media converter
- User's guide

Please notify your sales representative immediately if any items are missing or damaged.

#### 2. Overview

FB-10/100MMC Series Media Converter is designed to meet the needs for massive fiber network deployment and able to extend a legacy copper based Ethernet network via fiber cable to a maximum distance up to 120Km. It is fully compliant with IEEE802.3z standards; built-in Switch ASIC has turned the device function more like a 2 ports switch than a traditional converter. User can get all switching benefits such like traffic segmentation, frames checking & error filtering.

The installation and operation procedures of the device are simple and straightforward. Operation status can be monitored through a set of Diagnostic LED located in the front panel.

## 3. Features

- Support 1000Base-T, 1000Base-LX&1000Base-SX
- Convert 1000bps Ethernet copper port to optical port
- Fiber type: Multimode and single mode optional, double strand and single strand optional
- Up to 80Km distance on single-mode fiber
- Allow transmitting and receiving VLAN data packet
- Two types optional: stand-alone unit and Modular Chassis
- Internal power supply, including AC220V or DC-48V

#### 4. Installation

- Connect male RJ-45 plug connector at one end of cable to media converter RJ-45 jack connector.
- Connect male RJ-45 plug connector at other end of cable to DTE terminal RJ-45 jack connector
- Locate or build 802.3 compliant fiber cable with male two- stranded TX(RX) connectors appropriate to the media converter installed at both ends.
- Connect male TX(RX) cable connectors at one end of cable to RX(TX) female connectors, respectively, on media converter.
- Connect male TX(RX) cable connectors at other end of cable to RX(TX) connectors of 802.3 compliant fiber device.
- With 220V Insert professional communication power supply

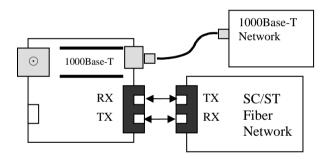


Fig.1 Basic Network Connection

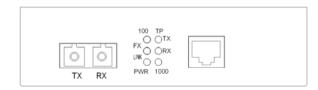


Fig.2 Front Panel of the standalone device

## 5. LEDs Description

LED	Color	Stat.	Description
PWR	Green	ON	Power supply OK
FX Link	Green	ON	Optical port links OK
TP 100	Green	ON	The device's speed is 100Mbps
TP TX	Yellow	ON	Copper Port is transmitting data
TP RX	Yellow	ON	Copper Port is receiving data
TP 1000	Green	ON	Speed is 1000Mbps

NOTE: If TP100&TP1000 are both OFF, the device works at the speed of 10Mbps.

# 6. Specifications

## 6.1 Ethernet Copper Port:

• Data rate: 10M, 100M, 1000Mbps;

Auto-negotiate on Full/Half duplex topology;

• Connectors: RJ-45 Connector;

Auto MDI/MDI-X

#### 6.2 Optical Port:

Support 1000Base-LX&1000Base-SX

• Connectors: SC/ST/FC single mode or Multimode

Single Strand and Double Strand fiber port optional

• Single-mode wavelength: 1310nm and 1550nm;

Multimode wavelength: 850nm and 1310nm;

• Transfer Distance: up to 80Km;

### 6.3 Device Size:

Standalone : 110mm×140mm×40mmChassis : 19inchx250mmx125mm

#### 6.4 Power:

Voltage: 100~240VAC or –48VDC
Power Consumption: <3 Watts</li>

#### 6.5 Environment:

• Temperature: 0-50°C

• Humidity: 0-90%(non-condensing)

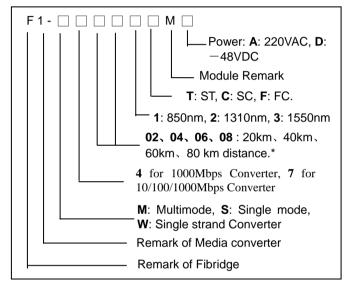
# 7. Ordering Information,

Model:

FB-10/100MMC Media Converter

For detailed product information, please see the Part Number

#### Part Number:



<sup>\*</sup> Distance Remark is just for Single-mode Converter.

**F1-M72CA** Multimode, 1310nm, SC, standalone, 220VAC power supply

**F1-M71CD** Multimode, 850nm, SC, standalone, -48VDC power supply

**F1-S4042CA** Single mode, Distance: 40km, 1310nm, SC, standalone, 220VAC power supply

**F1-S4042TM** Single mode, Distance: 40km, 1310nm, ST. Module

**F1-W4042CA** Single Strand Media Converter, Distance: 40km, Transmit

Wavelength:1310nm, Standalone

**F1-W7043CM** Single Strand Media Converter,

Distance: 40km, transmit Wavelength:1550nm, Module



# FB-10/100MMC Series Gigabit Ethernet Media Converter User Guide

(Version 1.1)

Beijing Fibridge Co., Ltd.