

10/100BaseTX to 100BaseFX Media Converter Series

User's Manual

FCC Warning

This device has been tested and found to comply with limits for a Class B digital device, pursuant to Part 2 and 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

CE Warning

This is a Class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

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Introduction

This Fast Ethernet Media Converter Series is designed to bridge a 100BaseTX signal to a 100BaseFX signal. It's used to extend the distance connection between two Fast Ethernet twisted-pair devices via the fiber cable transparently with no performance degradation.

This Media Converter Series is based on the switching hub design. It can support Auto-Negotiation and Flow Control function on the twisted-pair port. Besides, it can provide different types of fiber connectors, such as SC, ST, MT-RJ and LC for multi-mode or single-mode cables.

Package Contents

Before you start to install this Media Converter, please verify your package that contains the following items:

- One Media Converter
- One Power Adapter
- One User's Manual

Key Features

- Compliant with IEEE 802.3 10BaseT and IEEE 802.3u 100BaseTX/100BaseFX Standards
- One 10/100BaseTX Ethernet TP Port and One 100BaseFX Ethernet Fiber Port
- One 100BaseFX Fiber Port can support either Multi (SC/ST) or Single (SC, LC, MT-RJ) Mode
- TP Port can support Half/Full-Duplex, Auto-MDI/MDI-X and Auto-Negotiation
- Providing a slide switch for Full- and Half-Duplex selection on FX Port
- Multiple Fiber Connectors
- Providing 19" Converter Chassis for up to 16 slots with redundant power supply for optional expansion use

Installation

DC Input & External Power Adapter

The External Power Adapter specification:

- AC Input range from 90VAC to 260VAC
- AC frequency range from 47Hz to 63Hz, TUV, CE, UL Safety
- Power Adapter DC Output is +5VDC 1.5A
- The device DC Input is +5VDC 1A.

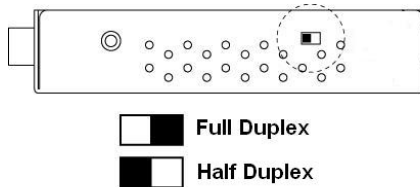
The TP Port

The device TP port support Auto-MDIX, Auto-Negotiation and Flow Control functions. The cable length is up to 100 meters for

shielded/unshielded twisted-pair cable. It allows users to connect the converter to 10BaseT and 100BaseTX devices.

The Fiber Port

There're different types of fiber connectors, such as SC, ST, MT-RJ and LC for multi-mode or single-mode fiber cables. Users can have Full-Duplex or Half-Duplex operation on the fiber port by a slide switch at the right side of the converter. The factory default is Full Duplex as the below chart.



LEDs

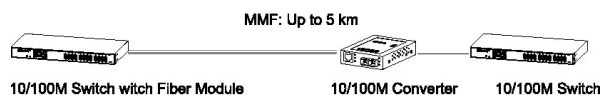
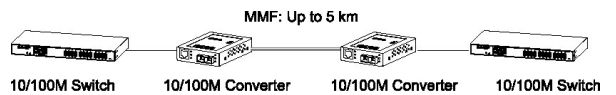
LED Indicators of Fast Ethernet Media Converter

LED	Status	Operation
Power	On	Power is on.
	Off	Power is off.
FDX	On	Full Duplex
	Off	Half Duplex
	Flashing	Partial collision occurs

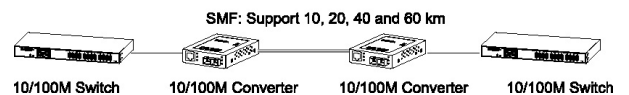
LINK/ACT	On	10/100Mbps Port is for connection
	Flashing	10/100Mbps is data activating
10/100M	On	Port is on 100M status.
	Off	Port is on 10M status.

Connections

Multi-Mode Fiber (MMF)



Single-Mode Fiber (SMF)



Technical Specifications

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX/100BaseFX
Features	Number of Ports: 1 10/100BaseT with RJ-45 Connector 1 100BaseFX with Fiber Connector (Multi/Single Mode, ST/SC, LC, MT-RJ Connector)
Data Transfer Rate	Ethernet: 10Mbps/Half-Duplex 20Mbps/Full-Duplex Fast Ethernet: 100Mbps/Half-Duplex 200Mbps/Full-Duplex
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP, up to 100 m 100BaseTX Cat. 5 UTP/STP, up to 100 m 100BaseFX: 50/125µm or 62.5/125µm Multi Mode ST/SC-Type Fiber optic cable, up to 2 km 9/125µm or 10/125µm Single Mode Fiber optic cable
LED Indicators	Per Port: (TX): Link/Act, Speed, FDX/COL (FX): Link/Act, FDX/COL Per Unit: Power
Power Requirement	DC5V/2A

Power Consumption	10 Watts (Max)
Dimensions	102 x 74 x 22 mm (L x W x H)
Weight	230 g
Operating Temperature	0 to 60 °C
Storage Temperature	-20 to 90 °C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class B, CE

Model Information

Model	Description
Multi-Mode SC Connector	100BaseFX Fiber, SC, MMF Up to 415 meters (1360 ft.) for MMF 50/125um or 62.5/125um optic cables on Half-Duplex operation. Up to 2, 5km (1.24, 3.1 mi.) for MMF 50/125um or 62.5/125um optic cables on Full-Duplex operation.
Multi-Mode ST Connector	100BaseFX Fiber, ST, MMF Up to 415 meters (1360 ft.) for MMF 50/125um or 62.5/125um optic cables on Half-Duplex operation. Up to 2, 5km (1.24, 3.1 mi.) for MMF 50/125um or 62.5/125um optic cables on Full-Duplex operation.
Multi-Mode MT-RJ Connector	100BaseFX Fiber, MT-RJ, MMF Up to 415 meters (1360 ft.) for MMF 50/125um or 62.5/125um optic cables on Half-Duplex operation. Up to 2km (1.24 mi.) for MMF 50/125um or 62.5/125um optic cables on Full-Duplex operation.

Multi-Mode LC Connector	100BaseFX Fiber, LC, MMF Up to 415 meters (1360 ft.) for MMF 50/125um or 62.5/125um optic cables on Half-Duplex operation. Up to 5km (3.1 mi.) for MMF 50/125um or 62.5/125um optic cables on Full-Duplex operation.
Single-Mode SC Connector	100BaseFX Fiber, SC, SMF Up to 10, 20, 40 or 60km for SMF 9125um optic cables on Full-Duplex operation
Single-Mode LC Connector	100BaseFX Fiber, LC, SMF Up to 20, 40 or 60km for SMF 9125um optic cables on Full-Duplex operation