FCC Warning

This device has been tested and found to comply with limits for a Class A 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.

NOTICE:
1. The changes or modifications not expressively approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.

CISPR A COMPLIANCE
This device complies with EMC directive of the European Community and meets or exceeds the following technical standard.
EN 550220- Limits and methods of measurement of radio interference characteristics of information technology equipment. This device complies with CISPR Class A.

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

Introduction

This Fast Ethernet media converter series are designed to bridge a 100Base-TX signal to a 100Base-FX signal. It's used to extend the connection distance between two Fast Ethernet twisted-pair devices via the fiber cable transparently with no performance degradation.

This converter series is base on the switching hub design. It's supported Auto-Negotiation and flow control function on the twisted-pair port. And provided different types of fiber connectors such as SC, ST, MT-RJ and LC for multi-mode or single-mode cables.
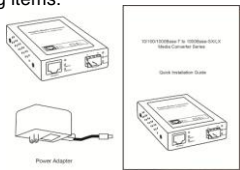
Product Features

- Complies with IEEE 802.3u 10Base-T/100Base-TX, 100Base-FX Standards.
- TP Port support Auto-MDIX and Auto-Negotiation.
- TP Port up to 100 meters for shielded/unshielded twisted pair cable.
- Support Full-Duplex & Half-duplex operation on TP base on Auto-negotiation.
- Support Full-Duplex & Half-Duplex operation on fiber by slide switch.
- Switch base design support flow control capability.
- 100Base-FX interface for up to 5km. (User 50/ 125µm Multi Mode Fiber optic cable)
- 100Base-FX interface for up to 60km. (Single-mode 9/ 125µm Single Mode Fiber optic cable)
- LED indicator supports.
- Multiple Fiber Connectors supports. (SC, ST, MT-RJ, LC…etc)
- Supports fault propagation.
- Can be installed on media converter chassis.

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 Quick Installation Guide

Technical Specifications

Standards	IEEE 802.3u 10Base-T/100Base-TX 100Base-FX
Media support	• 10Base-T EIA/TIA 568 Cat3,4,5, 5e or 6 UTP/STP • 100Base-TX EIA/TIA 568 Cat5, 5e or 6 UTP/STP • 100Base-FX Multi-mode 50/125µm & 62.5/125µm MMF • 100Base-FX Single-mode 9/125µm SMF
Distances support	• Twisted pair STP→120 meters / 393ft. • Multi-mode fiber: 415 meters for half-duplex / 5km for full duplex. • Single-mode fiber: 415 meters for half-duplex / 60km for full duplex.
Wavelength	1310nm on Single/ Multi-mode.
Data Transfer Rate	100Mbps/10Mbps
LED Indicators	System-power Twisted pair port-Link/Activity, Speed and FDX/Col Fiber port-Link/ Activity, FDX LEDs
Power Requirement	DC5V
Power Consumption	10 Watts (Max)
Dimensions	102 x 74 x 22 mm (L x W x H)
Weight	230 g
Operating Temperature	0 to 45℃
Storage Temperature	-20 to 90℃
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class A, CE

Model information

100Base-FX Multi-Mode 1310nm wavelength

Model	Description
Multimode SC Connector	• 100Base-FX fiber port (SC type MMF) • Up to 415 meters (1360 ft.) for MMF 50/125µm or 62.5/125µm optic cable on half-duplex operation. • Up to 2.5km (1.24,3.1mi.) for MMF 50/125µm or 62.5/125µm optic cable on full-duplex operation.
Multimode ST Connector	• 100Base-FX fiber port (ST type MMF) • Up to 415 meters (1360 ft.) for MMF 50/125µm or 62.5/125µm optic cable on half-duplex operation. • Up to 2.5km (1.24,3.1mi.) for MMF 50/125µm or 62.5/125µm optic cable on full-duplex operation.
Multimode MT-RJ Connector	• 100Base-FX fiber port (MT-RJ type MMF) • Up to 415 meters (1360 ft.) for MMF 50/125µm or 62.5/125µm optic cable on half-duplex operation. • Up to 2km (1.24mi.) for MMF 50/125µm or 62.5/125µm optic cable on full-duplex operation.
Multimode LC type Connector	• 100Base-FX fiber port (LC type MMF) • Up to 415 meters (1360 ft.) for MMF 50/125µm or 62.5/125µm optic cable on half-duplex operation. • Up to 5km (3.1mi.) for MMF 50/125µm or 62.5/125µm optic cable on full-duplex operation.

100Base-FX Single-Mode 1310nm wavelength

Model	Description
Single mode SC Connector	• 100Base-FX fiber port (SC type SMF) • Up to 10,20,40 or 60km for SMF 9/125µm optic cables on full-duplex operation.
Single mode LC Connector	• 100Base-FX fiber port (LC type SMF) • Up to 20,40 or 60km for SMF 9/125µm optic cables on full-duplex operation.

Installation
DC Input & External Power Adapter
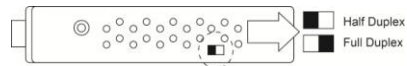
The External Power Adapter specification:
• AC Input range from 90VAC to 260VAC
• AC frequency range from 47Hz to 63Hz, TUV, CE, UL Safety
• Power Adapter DC Output is +5VDC
• The device DC input +5VDC

The TP Port (RJ-45)
This Media Converter's 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. Allow users connect the converter to 10Base-T and 100 Base-TX devices.

The Fiber Port
The converter provided different types of fiber connectors such as SC, ST, MT-RJ and LC for multi-mode or single-mode fiber cables. Full-duplex or half-duplex operation on fiber port.
The converter provided slide switch at right side of converter. The purpose of the slide switch is for fiber full-duplex or half-duplex operation. The factory default is full dull-duplex as below chart.
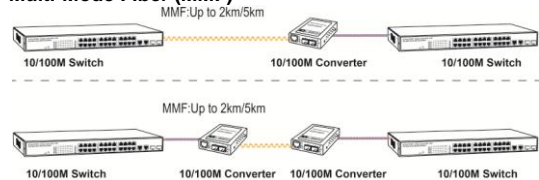

LEDs

LED Indicators of Media Converter

LED	Status	Operation
Power	On	Power is on.
FDX	On	Full Duplex
	Off	Half Duplex
	Flashing	Partial collision occurs
10/100M	On	Port is on the 100M status
	Off	Port is on the 10M status
LINK/ACT	On	10/100Mbps Port for connection
	Flashing	10/100Mbps is data activating

Connections
Multi-Mode Fiber (MMF)

Single-Mode Fiber (SMF)

Fast Ethernet Media Converters 10Base-T /100Base-TX to 100Base-FX Series

Quick Installation Guide