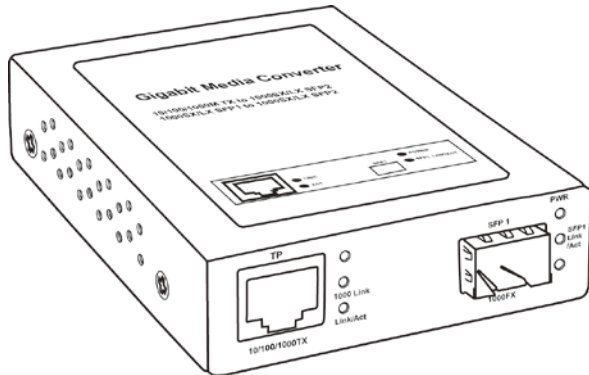


## SFP Mini-GBIC Ethernet Media Converter 10/100/1000Base-T to 1000Base-SX/LX series

### Quick Installation Guide



### 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.

### CE 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

The Gigabit Ethernet media converters series are designed to bridge a 10/100/1000Base-T signal to a 1000Base-SX/LX signal. It's used to extend the connection distance between two Gigabit Ethernet twisted-pair devices via fiber cable transparently with no performance degradation.

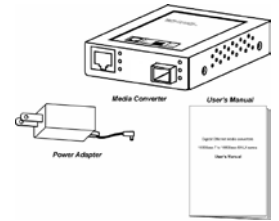
The Gigabit converter series are supported Auto-negotiation, Auto MDIX and Flow control function on twisted-pair port. The converter also supports Link Fault Pass-through(LFP) function for easily tracing the network link failure. Besides, it can provide SFP LC fiber connectors for multi-mode or single-mode cables.

It's a special design to have lower operating temperature than regular gigabit converters, and has good compatibility with most popular fiber module or fiber switch.

### 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



### Key Features

- Compliant with IEEE 802.3 10BaseT · IEEE 802.3u 100BaseTX · IEEE 802.3ab 1000BaseT and IEEE 802.3z 1000BaseSX/LX Gigabit Ethernet Standards
- One 10/100/1000BaseT Gigabit Ethernet TP Port and One SFP Slot for Gigabit Link
- One SFP slot can support either Multi or Single Mode SFP Modules
- TP Port can support Auto-Negotiation, Flow control and Auto-MDI/MDI-X
- Support Link Fault Pass-through Function
- DIP Switch on the back of the housing for switch forward and LFP function

### Installation

#### **I. DC input & external power adapter**

The external power supply 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.

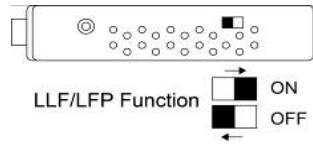
#### **II. The TP port**

The TP port of converter supported 10Base-T · 100Base-TX and 1000Base-T Auto-negotiation, Auto MDI/MDI-X and Flow control function. The cable length up to 100 meters for Cat5, 5e or 6 shielded/unshielded twisted pair cable.

#### **III. The SFP Module Slot port**

The converter provided SFP LC types of fiber connector for multi-mode or single-mode fiber cables.

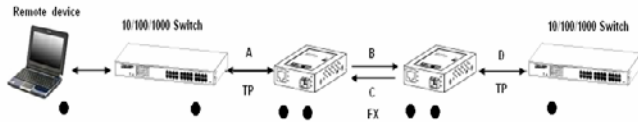
#### IV. DIP Switch Setting



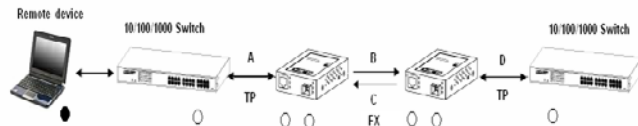
#### V. Link Fault Pass-through (LFP)Function

When LFP function is enabled, the device of either TP port or fiber port is loose or link, link status on TP port will inform the fiber port of the same device and vice versa. If the TP port is unplugged, the converter stops transmitting over the fiber port, causing the remote fiber node link to fail. The LED will show link failure on both the TP and fiber ports. If the fiber link fails, the converter causes the remote TP node link to fail. The LED also shows the link failure on both the TP and fiber ports. The figures below show normal status when the link succeeds and the error status when TP cable A / D or fiber cable B/C fails to connect.

##### Normal status via a pair of LFPs



##### Status if one of all cables A、B、C and D isn't link.



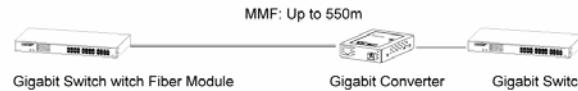
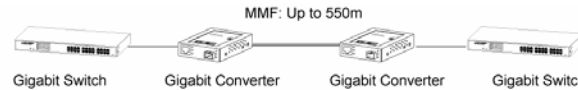
**Note:** ● indicates LNK/ACT LED On  
○ indicates LNK/ACT LED Off

#### LED Indicators

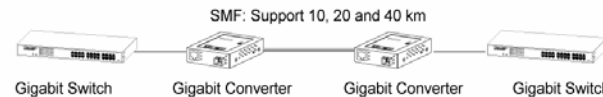
LED	Status	Description
Power	On	Power on
LINK/ACT	On	Fiber Link
	Flashing	Data active
100M/ACT	On	Link on 100M
	Flashing	Data active
1000M/ACT	On	Link on 1000M
	Flashing	Data active

#### Connections

##### Multi-Mode Fiber (MMF) application



##### Single-Mode Fiber application



#### Technical Specifications

<b>Standards</b>	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3ab 1000BaseT IEEE 802.3z 1000BaseSX/LX IEEE 802.3x Flow Control
<b>Features</b>	Number of Ports: 1 10/100/1000BaseT with RJ-45 Connector 1 SFP Module Slot
<b>Data Transfer Rate</b>	2000Mbps/Full-Duplex
<b>Transmission Media</b>	TP: 1000BaseT Cat. 5, 5E, 6 UTP/STP, up to 100 m 1000BaseSX: 50/125µm Multi Mode Fiber optic cable, up to 220 m 62.5/125µm Multi Mode Fiber optic cable, up to 550 m 1000BaseLX: 9/125µm Single Mode Fiber optic cable
<b>Led Indicators</b>	Per Port: (TX): 100M/Act, 1000M/Act (FX): Link/Act Per Unit: Power
<b>Power Requirement</b>	DC 5V
<b>Power Consumption</b>	5 Watts (Max)
<b>Dimensions</b>	102 x 74 x 22 mm (L x W x H)
<b>Weight</b>	210 g
<b>Operating Temperature</b>	0 to 45°C
<b>Storage Temperature</b>	-20 to 90°C
<b>Humidity</b>	10 to 90% RH (non-condensing)
<b>Certifications</b>	FCC, CE

#### Warning :

When the setting of the DIP switch is changed, the power has to be turned off and the new setting will be effective after turned on again.