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# **FCC Warning**

The Media Converter Series have been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These standards are designed to provide reasonable protection against harmful interference when these devices are operated in a commercial environment. These devices generate, use, and can radiate radio frequency energy that may cause harmful interference to radio communications unless installed in accordance with this User's Guide. Operation of these devices in a residential area is likely to cause harmful interference which will make the user responsible for the appropriate remedial action at his / her own expense.

# **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.



This is a lead-free and RoHS-compliant product.

### 1. Checklist

The carton should contain the following items:

- Media Converter
- AC-DC Power Adapter
- CD (User's guide & MIB file)

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

### 2. Overview

The Media Converter Series are designed to meet the increasing needs for Gigabit network deployment and are able to extend a copper-based Gigabit network via fiber cable to a maximum distance up to 80KM.

The Media Converter Series are fully compliant with IEEE 802.3, 802.3u, 802.3ab & 802.3z standards. It can be installed into a Converter RACK. The installation and operation procedures are simple and straightforward. Operation status can be locally monitored through a set of Diagnostic LED indicators located in the front panel.

#### **Features**

- 10/100/1000Base-T to 1000BASE-X Converter
- Standard: IEEE 802.3, 802.3u, 802.3ab & 802.3z
- Interface: 1 x RJ-45 LAN connector
  - 1 x SC connector or 1 x SFP Slot
  - 1 x Diag Button
- Auto-Negotiation in TX port
- MDI/MDIX Auto-Crossover supported
- LED: Power, FDX, Status, Speed, FO Link/Act, TX Link/Act
- Plug-and-Play installation
- Support Link Alarm
- Support Jumbo Frame 9K bytes (under 10,100,1000Mbps)
- Support Selectable ISP Ethernet Tag Type
- Q-in-Q Double Tag configuration
- Support DHCP Client
- Support SNMP / Web Managed interface
- Support SNMP v1 and v2c
- Support HTTP Firmware Upgrade
- Support Power Down Trap Management

### 3. Installation

- Attach fiber cable from the Media Converter to the fiber network. The fiber connections must be matched – transmit socket to receive socket.
- Attach a UTP cable from the 10/100/1000BASE-T network to the RJ-45 port on the Media Converter.
- Connect the power adapter to the Media Converter and check whether the Power LED indicator lights up.
   The TX Link/Act and FO Link/Act LED indicator will light up when all the cable connections are satisfactory.

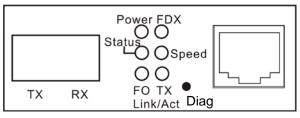


Figure 1. Media Converter Dual-Fiber Front Panel

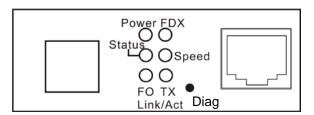


Figure 2. Media Converter Single-Fiber & SFP Front Panel

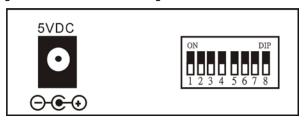


Figure 3. Media Converter Series Rear Panel

## 4. LED Description

LED	Color	Function		
Power	Green	Lit when power is available.		
TX/Link Act	Green	Lit when TX cable connection with the remote device is good. Blink when TP traffic is present.		
	Orange	Blink when Fiber or Copper link is down in Link Alarm enabled mode.		
FO/Link Act	Green	Lit when Fiber cable connection with the remote device is good. Blink when FO traffic is present.		
	Orange	Blink when Fiber or Copper link is down in Link Alarm enabled mode.		
FDX	Green	Lit when TP works in Full-Duplex. Not-Lit when TP works in Half- Duplex.		
Speed	Green	Lit when TP works in 100M. Not-Lit when TP works in 10M or is not linked.		
	Orange	Lit when TP works in 1000M.		
Status	Green	Lit when TP and FO link is up. Blink when Loopback test is performed.		
	Orange	Lit when TP or FO link is down. Blink when diagnostic testing is failed.		

## 5. Technical Specifications

Standards: IEEE 802.3, 802.3u, 802.3ab,

802.3z

Interface: 1 x RJ-45 LAN connector

1 x SC connector or SFP Slot

1 x Diag button

Operation LED: Power, FDX, Status, Speed,

FO/Link Act. TX/Link Act

Power: I/P AC 100-240V

O/P DC 5V, 1.6A

Power Consumption: 3.4W Shipping Weight: 0.6KG

Dimensions: 71mm(W)X94mm(D)X26mm(H)

Temperature: Operating: 0~50 °C

Storage: -20~60 °C

Humidity: 5%~90% RH

Emission: Electrical: UL, CSA

EMI: FCC Class A, CE

\*Please contact us for further reports and updates.

Media:

TP EIA/TIA-568 CAT 5e, 1000M

Fiber 50/125, 62.5/125um multi-mode fiber

9/125, 10/125um single-mode fiber

## 6. DIP SWITCH Setting

The factory default setting for PIN 1 and PIN 5 is ON. The rest of Pins are OFF.

Pin NO. & Button	Function	OFF	ON	
1	TX Auto-Negotiation	Disable	Enable	
2	Manual TX Data Rate 10M/100M	10M	100M	
3	Manual TX Data Rate 1000M	10M or 100M	1000M	
4	Flow Control	Disable	Enable	
5	Fiber Auto-Negotiation	Force	Enable	
6	Reserve	Always OFF		
7	Link Alarm	Disable	Enable	
8	TP Configuration	From S/W	From DIP	
Diag button	Press once for Loopback test. Press for 10 seconds to restore factory default setting.			

**Note:** Before changing Data Rate and Duplex mode setting, please make sure Auto-Negotiation is disabled.



### **FCN-3112**

10/100/1000Base-T to 1000Base-X Media Converter

User's Guide

v0.91

