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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 package should contain the following items:

- Media Converter
- AC-DC Power Adapter
- Quick Installation Guide

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.

Major Features:

- Auto-Negotiation in TX port
- MDI/MDIX Auto-Crossover supported
- Support Flow Control
- Support LLF
- 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 Management 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.

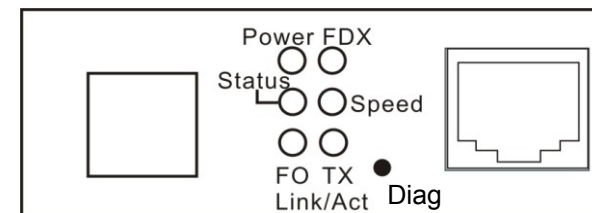


Figure 1. Media Converter Single-Fiber & SFP Front Panel

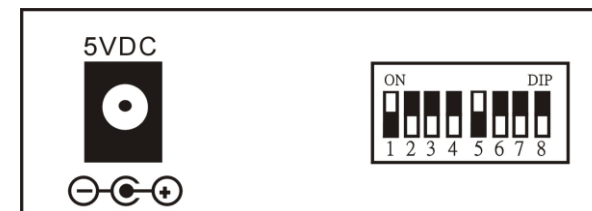


Figure 2. Media Converter Series Rear Panel

4. DIP SWITCH Setting

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

Pin NO.	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	LLF	Disable	Enable
8	TX 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.

5. 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 TX traffic is present.
	Orange	Blink when Fiber or Copper link is down in LLF 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 LLF enabled mode.
FDX	Green	Lit when TX works in Full-Duplex. Not-Lit when TX works in Half-Duplex.
Speed	Green	Lit when TX works in 100M. Not-Lit when TX works in 10M or is not linked.
	Orange	Lit when TX works in 1000M.
Status	Green	Lit when TX and FO link is up. Blink when Loopback test is performed.
	Orange	Lit when TX or FO link is down. Blink when diagnostic testing fails.

6. Technical Specifications

Standards:	IEEE 802.3, 802.3u, 802.3ab, 802.3z
Interface:	1 x RJ-45 LAN connector 1 x SFP Slot 1 x Diag button
LED:	Power, FDX, Status, Speed, FO Link/ACT, TX Link/ACT
Power Adapter:	I/P AC 100-240V O/P DC 5V, 2A
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:	EMI: FCC Class A, CE

*Please contact us for further reports and updates.

Media:

TX	EIA/TIA-568 CAT 5e, 1000M
Fiber	50/125, 62.5/125um multi-mode fiber 9/125, 10/125um single-mode fiber

CM-121 10/100/1000BASE-T to 1000BASE-X Media Converter

User's Guide

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