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## FCC Warning

This converter has 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 this device is operated in a commercial environment. This device generates, uses, and can radiate radio frequency energy and may cause harmful interference to radio communications unless installed in accordance with this User's Guide. Operation of this device 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

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user will need to consider adequate preventative methods.

## 1. Checklist

The package should contain the following items:

- Media Converter
- AC-DC Power Adapter
- User's Guide

Please notify your sales representative immediately if any item is missing or damaged.

## 2. Overview

This Media Converter is designed to meet the massive needs for Gigabit network deployment. It is fully compliant with 802.3u and 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:

- LED indicators for link and power status
- 9K bytes Jumbo Frame
- Link Alarm
- 100Mbps to 100Mbps / 1000Mbps to 1000Mbps dual rate transmission
- Full compatibility with Universal Media Converter RACK

## 3. Installation

- Attach single mode fiber cable from one port on the converter to the corresponding device.
- Attach multi-mode fiber cable from the other port on the converter to the corresponding device.
- Be cautious that the transmission speed of two fiber ports must be matched, either 100M to 100M

or 1000M to 1000M.

- Connect the power adapter to the converter and check that the Power LED lights up. The FO1 and FO2 LEDs will light up when both fiber connections are satisfactory.

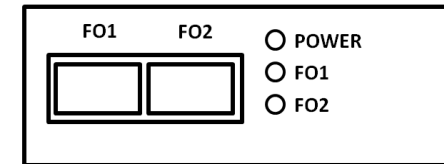


Fig 1. Front Panel

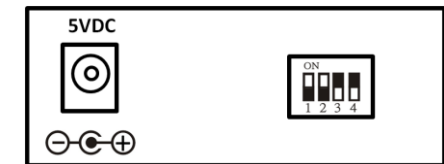


Fig 2. Rear Panel

## 4. DIP SWITCH Setting

The default setting for PIN 1 and 2 is ON; PIN 3 and 4 are OFF.

Pin No.	Function	OFF	ON
1	Speed	100Mbps	1000Mbps
2	F/O mode	Force	Auto
3	Link Alarm	Disable	Enable
4	Reserved	-	-

### NOTE:

The setting of F/O mode is effective only when the speed is set to 1000Mbps.

## 5. LED Description

LED	Color	Function
POWER	Green	Power is on.
	Orange	Link Alarm is triggered.
FO1	Off	Link is down.
	Green	Link is up, and working in 100M.
	Orange	Link is up, and working in 1000M.
	Blinking	Traffic is present.
FO2	Off	Link is down.
	Green	Link is up, and working in 100M.
	Orange	Link is up, and working in 1000M.
	Blinking	Traffic is present.

### NOTE:

Once the Link Alarm function is triggered, the POWER LED will light in orange until both FO1 and FO2 connections are good.

## 6. Technical Specifications

<b>Standards</b>	IEEE 802.3u, 802.3z
<b>Interface</b>	100/1000 SFP slot X 2
<b>LED</b>	POWER, FO1, FO2
<b>Power</b>	I/P: AC100-240V; O/P: DC5V, 2A
<b>Power Consumption</b>	1.82W
<b>Shipping Weight</b>	0.44KG
<b>Dimensions</b>	71mm(W)X94mm(D)X26mm(H)
<b>Temperature</b>	Operating: 0°~50°C; Storage: -20°~60°C
<b>Humidity</b>	5%~90% RH
<b>Certification</b>	FCC/CE Class A
<b>Media</b>	9/125, 10/125um single-mode fiber 50/125, 62.5/125, 100/140µm multimode fiber

\*Please contact us for further reports and updates.

## Fiber Transceiver Information

### Multimode

TYPE	SFP-31FC	SFP-21FC
Speed	1000Mbps	100Mbps
Connector Type	LC	LC
Wavelength	850nm	1310nm
Typical Distance	550m	2km
Min TX PWR	-10.0dBm	-20.0dBm
Max TX PWR	-3.0dBm	-14.0dBm
Sensitivity	-18.0dBm	-30.0dBm
Link Budget	8.0 dB	10.0 dB

### 100M Single Mode

TYPE	FC(SM-20)	FC(SM-30)	FC(SM-50)	FC(SM-80)
Connector Type	LC	LC	LC	LC
Wavelength	1310nm	1310nm	1310nm	1550nm
Typical Distance	20km	30km	50km	80km
Min TX PWR	-15.0dBm	-15.0dBm	-5.0dBm	-5.0dBm
Max TX PWR	-8.0dBm	-8.0dBm	0dBm	-14.0dBm
Sensitivity	-28.0dBm	-34.0dBm	-35.0dBm	-34.0dBm
Link Budget	13.0 dB	19.0 dB	30.0dB	29.0 dB

### 1000M Single Mode

TYPE	FC(SM-10)	FC(SM-20)	FC(SM-30)	FC(SM-50)
Connector Type	LC	LC	LC	LC
Wavelength	1310nm	1310nm	1310nm	1550nm
Typical Distance	10km	20km	30km	50km
Min TX PWR	-9.0dBm	-7.0dBm	-4.0dBm	-5.0dBm
Max TX PWR	-3dBm	0dBm	1dBm	0dBm
Sensitivity	-22.0dBm	-24.0dBm	-24.0dBm	-24.0dBm
Link Budget	13.0 dB	17.0 dB	20.0dB	19.0 dB

### 1000M Wave-Length WDM

TYPE	W2A(SM-10)	W2B(SM-10)	W2A(SM-20)	W2B(SM-20)
Speed	1000Mbps	1000Mbps	100Mbps	100Mbps
Connector Type	LC	LC	LC	SC
TX Wavelength	1310nm	1550nm	1310nm	1550nm
RX Wavelength	1550nm	1310nm	1550nm	1310nm
Typical Distance	10km	10km	20km	20km
Min TX PWR	-9.0dBm	-9.0dBm	-8.0dBm	-8.0dBm
Max TX PWR	-3.0dBm	-3.0dBm	0dBm	0dBm
Sensitivity	-20.0dBm	-20.0dBm	-20.0dBm	-20.0dBm
Link Budget	11.0 dB	11.0 dB	12.0 dB	12.0 dB

**NOTE:** Specifications may change without prior notice.

## 100/1000BASE-X Multimode to 100/1000BASE-X Single Mode Standalone Media Converter

User's Guide

Version 1.0