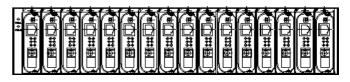
Ethernet Media Converter & Rack Chassis

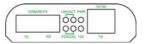


This quick installation guide describes how to install and use the Ethernet Media Converter and optional Rack Chassis.

Description

The media converter provides one channel for media conversion between 10/100BaseTX and 100BaseFX. It can be used as a standalone device or with a standard 19 inch chassis as shown below.





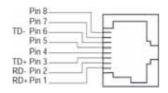
Features

- One-channel media conversion: 10/100BaseTX & 100BaseFX
- Fiber media:
 - Multi-mode fiber using SC or ST connectors Single-mode fiber using SC connectors
- Auto negotiation of speed and duplex mode on TX port
- Auto MDIX on TX port
- DIP switch configuration for: Link-fault-pass-through Fixed speed
- Half/full duplex

 Store-and-forward mechanism
- · Non-blocking full wire-speed forwarding rate
- Supports broadcast storm filtering
- Back-pressure & IEEE802.3x compliant flow control
- Front panel status LEDs
- External AC to DC power adapter (included)
- Used as a stand-alone device or with a chassis
- Hot-swappable when used with a chassis

10/100BaseTX and 100BaseFX Connectors 10/100BaseTX Connections:

Pin	Regular Ports	Uplink Port	
1	Receive Data + (input)	Transmit Data + (output)	
2	Receive Data – (input)	Transmit Data – (output)	
3	Transmit Data + (output)	Receive Data + (input)	
4	NC	NC	
5	NC	NC	
6	Transmit Data – (output)	Receive Data – (input)	
7	NC	NC	
8	NC	NC	

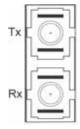


LED's and DIP Switch

LED Status:

LEDs	State	Indication
PWR	Steady	Power on (PWR stands for POWER)
	Off	Power off
100	Steady	100Mbps network connection
	Off	10Mbps network connection
LNK/ACT	Steady	Network connection established (LNK stands for LINK)
	Flashing	Transmitting or receiving data(ACT stands for ACTIVITY)
	Off	Neither a network connection established nor transmitting/receiving data
FDX/COL Steady Cor		Connection in full duplex mode(FDX stands for FULL-DUPLEX)
	Flashing	Collision occurred (COL stands for COLLISION)
	Off	Connection in half-duplex mode

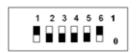
100BaseFX Connections:



The Tx (transmit) port of device 1 is connected to the Rx (receive) port of device 2, and the Rx (receive) port of device 1 to the Tx (transmit) port of device 2.

DIP Switch Settings:

Pos. DOWN (0)		UP (1)		
1	Enable Link-fault-pass-through	Disable Link-fault-pass-through		
2	2 RJ45 Auto Negotiation Enabled RJ45 Forced Mode			
3	3 RJ45 Forced to 100Mbps RJ45 Forced to 10Mbps			
4 RJ45 Forced to Full Duplex RJ45 Forced to Half Duple		RJ45 Forced to Half Duplex		
5 Fiber Forced to Full Duplex Fiber Forced to Half Duplex		Fiber Forced to Half Duplex		
6				







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Link-fault-pass-through

Link-Fault-Pass-Through Overview:

When two Media Converters are connected via their fiber

Link Fault of the FX port:

A Link Fault condition will be sensed on the RJ45 port whenever the media converter detects a Link Fault condition on the Fiber port. (The 100, LNK/ACT, and FDX/COL LED's will be off.)

Link Fault of the TX port:

Media Converter A: A Link Fault condition will be sensed on the Fiber port whenever the media converter detects a Link Fault condition on the RJ45 port. Thus, the 100, LNK/ACT, and FDX/COL LEDs of the RJ45 port of the Media Converter A would be off.

Media Converter B: A Link Fault condition will be informed to the Fiber port of the Media Converter B. Then a Link Fault condition will be sensed on the RJ45 port of the Media Converter B whenever the Media Converter B detects a Link Fault condition on the Fiber port. Thus, the 100, LNK/ACT, and FDX/COL LEDs of the Media Converter B would be off.

Link Fault of the FX port						
		TX Port		FX Port		
LEDs	PWR	100	LNK/ACT	FDX/COL	LNK/ACT	FDX/COL
Media Converter A	ON	OFF	OFF	OFF	OFF	OFF
Media Converter B	ON	OFF	OFF	OFF	OFF	OFF
Link Fault of the TX port						
		TX Port		FX Port		
LEDs	PWR	100	LNK/ACT	FDX/COL	LNK/ACT	FDX/COL
Media Converter A	ON	OFF	OFF	OFF	ON	ON
Media Converter B	ON	OFF	OFF	OFF	OFF	OFF

Installation

Connecting Power:

The media converter is a plug-and-play device, so simply plug the power supply into the converter and then the AC outlet.



Installing the Media Converter into the Chassis:

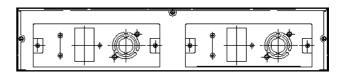
The media converter fits into any of the chassis expansion slots.

- · First, remove one of the expansion slot carriers
- · Then, install the converter onto the carrier
- Next, insert the carrier onto the guide rails of the expansion slot
- · Carefully slide the carrier unit in, until it firmly fits the chassis
- · Reinstall the screw that locks the carrier to the chassis

Installing the Power Supply into the Chassis:

The power supply fits into either of the two power supply bays on the back of the rack chassis.

- · First, remove the cover plate
- · Then, insert the power supply into the guide rails of the bay
- Carefully slide the power supply in until it firmly fits in the chassis
- · Tighten the thumb screws provided on the power supply



Rack Chassis Specifications

Features:

- House up to 16 media converters
 Front panel LED's for power status
 Standard 19 inch Rack, 2U size
 Hot-swappable: Media converters and Power supplies
- Cooling fans for ventilation one on right & left sides of chassis
 Ventilation holes on each side
- Load sharing mechanism:
 If one power supply fails, the other takes over immediately
- Each converter bay is electrically isolated from each other
 Over current protection

Fuses on PCB for each converter bay Fuses on each power supply

Chassis Specifications:

Houses up to 16 media converters
One power supply included, second optional
hot-swappable
One fan on the left and right side of the chassis
One LED for each power supply's power status)
17.3 x 10.9 x 3.5 in (44 x 27.6 x 9 cm)
Standard 19 inch, 2U size
8.5kg approx. (with sixteen media converters)

Bower Supply Specifications

rower Suppi		y opecifications.
	Power Input	110 to 240VAC, 50/60Hz
	Power Output	12VDC, 84W max.
	Load	7A max.
ſ	Operating Temp	0°C to 40° C (32°F to 104°F)
	Storage Temp	-25°C to 70°C (-13°F to 158°F)
	Emissions	FCC Part 15 Class A: CE Class A

Media Converter Specifications

Media Converter Specifications:

Applicable Standards		IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX & 100BaseFX	
Fixed Ports		(1) TX port, (1) FX port	
Speed	10BaseT	10/20Mbps for half/full-duplex	
	100BaseTX/FX	100/200Mbps for half/full-duplex	
Switching Me	ethod	Store-and-Forward	
Forwarding r	ate	14,880/148,800pps for 10/100Mbps	
Cable			
10BaseT		2-pair UTP/STP Cat. 3, 4, 5 up to 100m	
100BaseTX		2-pair UTP/STP Cat. 5 up to 100m	
100BaseFX		MMF (50 or 62.5μm), SMF (9 or 10μm)	
LED Indicators		Per Unit - PWR1, PWR2, FAULT, LFP	
		Per Port - TX: LNK/ACT, FDX/COL, 100	
		FX: LNK/ACT, FDX/COL	
Dimensions		4.3 x 3.2 x 0.9 in. (10.9 x 8 x 2.4 cm)	
Weight		0.15 Kg	
Power		External Power Supply 12VDC @ 280mA	
Power Cons	umption	3.4W	
Operating Temperature		0°C to 50°C	
Storage Ten	nperature	-25°C to 70°C	
Humidity		10 to 90%, non-condensing	
Emissions		FCC Part 15, Class A; CE	
Safety		UL/CUL 60950, EN60950, IEC 60950, IEC61000-6-2	



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