Preface

This manual describes how to install and use the 16-Bay Media Converter Chassis. The system introduced here is capable of housing up to sixteen media converters, each of which offers one channel media conversion solution:

10/100Base-TX ↔ 100Base-FX
100Base-TX ↔ 100Base-FX
100Base-FX ↔ 100Base-FX
10/100/1000Base-TX ↔ 1000Base-SX/LX
1000Base-T ↔ 1000Base-SX/LX
1000Base-SX/LX ↔ 1000Base-SX/LX
10/100Base-TX Ethernet Extender

In this manual, you will find:

- Introduction on the Chassis System
- Product features
- Illustrative LEDs functions
- Installation instructions
- Specifications

Table of Contents

Product Overview

16-Bay Media Converter Chassis

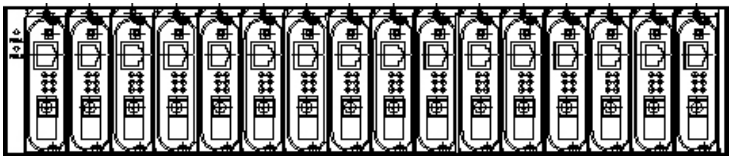

Figure 1: Chassis equipped with two power supplies

Package Contents

When you unpack the product package, you shall find these items listed below.

- ✓ *16-Bay Media Converter Chassis*
- ✓ *Two power supplies installed on the chassis*
- ✓ *AC power cord*
- ✓ *User's Manual*
- ✓ *Accessories: rackmount screws, brackets, & bracket screws*
- ✓ *Media converter carriers, fitted to each bay*

Please inspect the contents, and report any apparent damage or missing items immediately to your authorized reseller.

Product Features

- *HOUSE UP TO SIXTEEN MEDIA CONVERTERS*
- *FRONT PANEL LEDS FOR POWER STATUS*
- *STANDARD 19" RACKMOUNTABLE SIZE, 2U*
- *NON-STOP OPERATION & MINIMAL DOWNTIME*
- *HOT-SWAPPABLE*

  The following items are designed to be hot swappable to allow easy and quick replacement:

  - Media converters
  - Power supplies with fans
- *ADEQUATE VENTILATION*
  - Provides one cooling fan on the left and right side
  - Ventilation holes on each side
- *POWER REDUNDANCY & POWER ISOLATION*

  Two high quality internal power supplies provided for load-sharing purpose.

  - Load sharing mechanism: If one power supply should fail, the redundant power supply is capable of taking over immediately
  - Converter bay power isolation ensures each bay is electrically isolated from each other
- *OVER CURRENT PROTECTION*
  - Fuses on PCB for each converter bay
  - Fuse on each power supply

Front Panel Display

FRONT PANEL

The front panel of this 16-Bay Media Converter Chassis shows it is capable of housing up to sixteen media converters in bay 1~16.

There is an array of LED indicators, which provides you with instant feedback on the status of each power.

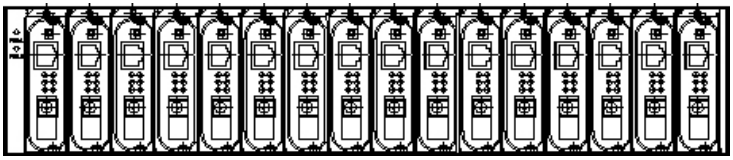

Figure 2: Front Panel of the 16-Bay Media Converter Chassis

UNDERSTANDING LEDS

Power Supply's Switch LED	Green	Power switched on
	Off	Power switched off
		Blown fuse
		Power supply failed

ⓘ Before you use this table for troubleshooting, make sure the chassis system is properly connected to power and switched on.

Installation

Selecting a Site for the Equipment

As with any electric device, you should place the equipment where it will not be subjected to extreme temperatures, humidity, or electromagnetic interference. Specifically, the site you select should meet the following requirements:

- The ambient temperature should be between 32 and 113 degrees Fahrenheit (0 to 45 degrees Celsius).
- The relative humidity should be less than 95 percent, non-condensing.
- Surrounding electrical devices should not exceed the electromagnetic field (RFC) standards for IEC 801-3, Level 2 (3V/M) field strength.
- Make sure that the equipment receives adequate ventilation. Do not block the ventilation holes on each side of the equipment or the fan exhaust port on the side or rear of the equipment.
- The power outlet should be within 1.8 meters of the equipment.

Deciding How to Install the System

We strongly suggest that you install the chassis first, as this is more convenient for you to install media converters into the chassis with ease. The accessories supplied in the product package includes: rackmount screws, rackmount brackets, and bracket screws.

This well-built chassis can be installed in the following ways:

MOUNTED TO 19-INCH STANDARD RACK

Use the rackmount brackets and screws to install the chassis into any EIA 19" standard rack.

Step 1: Attach the brackets to each side of the chassis. Apply screws to each side and secure them tightly.

Step 2: Carefully position the chassis into the rack. Align the brackets to the side holes on the rack and use rack screws to secure the chassis with the rack.

Step 3: Proceed to the "Connecting to Power" section.

DESKTOP OR ANY FLAT SURFACE

The chassis can sit on desktop or any flat surface with adequate space and ventilation. If you want to place it onto a shelf, make sure the shelf can withstand a minimum weight of 10kg.

Step 1: Simply put the chassis on the desired place.

Step 2: Ensure the chassis receives good ventilation.

Step 3: Proceed to the "Connecting to Power" section.

Installing Media Converter

The chassis is equipped with media converter carriers, each of which is fitted into bays of the chassis.

Step 1: To install a media converter onto any of the carriers, you have to unscrew the carrier from the desired bay first.

Step 2: Fit the media converter onto the carrier.

Step 3: When the media converter is completely seated onto the carrier, insert the carrier to the guide rails of the bay slot.

Step 4: Carefully slide in the carrier until it is fully and firmly fitted to the power socket. Fasten the screws on the carrier.

ⓘ

i. The chassis is designed to house only the proprietary media converters.
ii. Never insert any media converter into the chassis directly without using the supplied carriers. These carriers allow secure and consistent placement of the media converters into the chassis' backplane without causing any damage.
iii. For details, please refer to the User's Manual for media converters.

Connecting to Power

POWER SUPPLY

The chassis ships with two power supplies. When the chassis is equipped with two power supplies, you can have the following advanced performance.

- **Hot Swappable –**
  The design of the power system is based on an idea of providing maximum flexibility and redundancy. In this way, you may remove any of the two power supplies without turning off the system.

- **Redundancy –**
  During operation, both power supplies are switched on and share the current load. In case that one of them should fail, the other will instantaneously take 100% of the load without any loss. Similarly, if one power supply is removed from servicing, it can be switched off and removed while the chassis continues functioning.

- **Protection System –**
  The power of each converter bay comes from the two shared power supplies. Each bay is isolated from each other under a certain protection mechanism, so that it is free from any problem that might occur to the power supplies or faulty converter bay. This is the best solution to protect your investment in media converters.

CONNECTING TO POWER

The chassis system is equipped with two power supplies.

Step 1: Connect the supplied AC power cord to the receptacle on the front panel of each power supply.

Step 2: Attach the plug into a standard AC outlet with a voltage range from 100~240VAC.

Step 3: Turn on the chassis system by flipping the ON/OFF switch beside the receptacle to ON position. The LEDs on the front panel of the media converter chassis system will come on then.

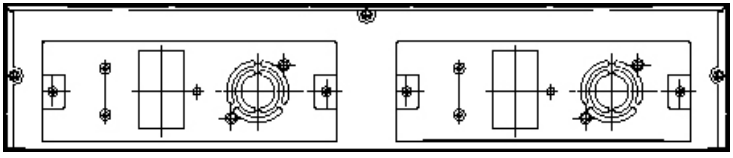

Figure 3: The rear of the 16-Bay Media Converter Chassis

Cooling System

The chassis system can hold two power supplies and up to sixteen media converters, and therefore, it is necessary to provide a good cooling system and so to obtain adequate ventilation.

The chassis is equipped with two hot-swappable power supplies with fans at the rear. The chassis is also equipped with one fan on the left and right side of the chassis.

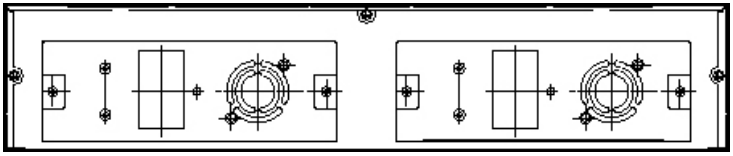

Figure 4: The rear side of the 16-Bay Media Converter Chassis

Specifications

CHASSIS SYSTEM

Capacity	Sixteen bays for housing up to sixteen media converters
Power	Tow power supplies provided, hot-swappable
Cooling	Two power supplies with fans One fan on the left and right side of the chassis
LED Indicators	2 LEDs (1 LED for each power supply's power status)
Dimensions	440mm (W) × 276mm (D) × 90mm (H) (17.32" (W) × 10.87" (D) × 3.54" (H)) Standard 19" size, 2U
Net Weight	6.8Kg (14.96lbs.)

POWER SUPPLY

Power Input	100~240VAC, 50~60Hz 48VDC
Power Consumption	73.2W Max.
Operating Temperature	0℃ to 45℃ (32℉ to 113℉)
Storage Temperature	-10℃ to 70℃ (14℉ to 158℉)
Humidity	5% to 95% (non-condensing)
Safety	UL60950-1
Emissions	CE Mark Class A, FCC Part 15 Class A