

Product Specification

Managed Media Converter Chassis

MC-1610MR / MC-1610MR48

Version 1.0

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Change History:

Revision:	Date:	Author:	Change List
Version 1.0	2009/03/10	Marc Liao	Initial Release

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1. PRODUCT DESCRIPTION

The MC-1610MR / MC-1610MR48 series provide 16-slots and one management system in a 19"-rack chassis, the MC-1610MR / MC-1610MR48 series is designed for the applications such as FTTx installation for ISPs, telecoms, campuses and enterprises. Various types of optic connectors, and fiber-optic wires on the distance basis are provided flexibly.

The 16-slots for optional FST-8 / GST-7 / GST-8 series Fast / Gigabit Ethernet Smart Media Converter installation makes building a network solution of FTTH (Fiber to the Home), FTTB (Fiber to the Building) or FTTC (Fiber to the Curb) for ISPs, enterprises and campuses, MC-1610MR / MC-1610MR48 series builds the FTTx easily. Therefore, the MC-1610MR / MC-1610MR48 series will perfectly satisfy diverse demands while providing reliable and efficient network solution based on distance and installation budgets.

With an independent power supply on each slot of the MC-1610MR / MC-1610MR48 series, any converter is hot-swappable without causing an interruption to other converters; the FST and GST Series Smart Media Converter provide Media conversion between copper to FX, SX and LX optical model for distance from 220m and up to 120km kilometers. The flexibility allows MC-1610MR / MC-1610MR48 series to grow with the network and providing space efficient and cost-effective scalable solution.

The management function enables network administrators to monitor Media Converter connection status and configure the converter via Web browser remotely or locally via an RS-232 console port. Its management function allow network administrator to monitor the slide in converter module connection status and configure the converter module. Through the management interface, the entire status of the converters will be clearly demonstrated within the chassis form on / off and status / statistics of ports. The MC-1610MR / MC-1610MR48 series is great ideal for telecom and corporate applications where a number of fiber links need to be managed and controlled from a central location.

Power Redundant - MC-1610MR / MC-1610MR48 series supports the optional hot-swappable **Redundant Power System (RPS)**. The MC-1610MR equip with one 100~240V AC power supply unit and MC-1610MR48 equip with one DC -48V power supply unit on its standard package, both MC-1610MR and MC-1610MR48 provide one spare power supply unit slot for option redundant power supply installation. A redundant power supply is also provided to enhance the reliability with options of either 100~240V AC power supply unit or DC -48V power supply unit. The continuous power systems are specifically designed to handle the demands of high tech facilities requiring the highest power integrity available. Also, -48V DC power supply implemented make it as telecom level device that can be located at the electronic room.

Fiber-Optic Redundant Link - The redundancy back-up and error tolerance capability of the link can be greatly improved to guarantee the network stability. The redundant link is designed for critical networks that require fibers or copper links to automatically rapid recovery, such as ISPs, telecom, hospitals, banks and enterprises. If the port status of master converter is link down, it forwards the packet to the slave converter's port of the backup pair.

Temperature and FAN status Monitoring - The MC-1610MR / MC-1610MR48 series is equipped with temperature sensor and cooling fans to ensure reliable operation. Whenever the temperature detects or cooling fan stop service, the Managed Media Converter Chassis display related information on the Web management interface.

2. PRODUCT FEATURES

Hardware

- High quality 19"Rack-Mountable Chassis installation
- Supports up to sixteen hot-swappable slide-in modular Media Converter
- Supports the PLANET smart series Fast Ethernet and Gigabit Ethernet Media Converter FST-80x and GST-70x / GST-80x
- Two power slots at rear panel for redundant power support with options of 100~240V AC or -48V DC supplies
- Bay power isolation ensure each bay is electrically isolated from each other
- Up to two fans installation for increased air-flow for system cooling
- One 10/100Mbps Fast Ethernet port and one RS-232 port for management
- Management Fast Ethernet interface supports Auto-MDI / MDI-X for 10/100Base-TX port
- LED indicators for system, power and fan status
- EMI standards complies with FCC, CE class A

System Management

- Configurable through console, Web and SNMP
- Provides SNMP status of converters with trap functions for any chassis and connectivity events.
- Simple Network Management Protocol
 - SNMP v1, v2c
 - SNMP Trap
 - Public MIB
 - Private MIB
- NTP Client (Time Zone Setting)
- Remote Syslog and local System log
- DHCP Client and DNS Client
- Temperature detects display and alarm
- Web Firmware Upgrade
- Management account login session control
- PLANET Smart Discovery Utility for deploy management

Converter Management

- Provides media Link / Connection Speed Duplex status for each module
- Redundant Back up (Media Converter Link Redundant)
- Reduces the effort of converter's maintenance and management

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

CPU: Realtek RTL8186V x1

PHY: IC+ IP101A

SDRAM: 128MB Synchronous DRAM

FLASH Memory: 32Mbit FLASH Memory x1

3.2 FUNCTION SPECIFICATION

Model	MC-1610MR	MC-1610MR48
Hardware Specification		
Slot	16 open Slot(115 x 80 x 26mm, W x D x H) 2 power slot s (one fixed, one vacant*)	
Power Output	5V DC per slot, 2A maximum	
Management Interface		
Standards	IEEE 802.3 10Base-T Ethernet, IEEE 802.3u 100Base-TX Fast Ethernet, IEEE 802.3x Flow control	
Fixed interface	10/100Base-TX port x1, RS-232 console port x1, Reset button x1	
Speed	Ethernet: 10/20Mbps for half / full-duplex, Fast Ethernet: 100/200Mbps for half / full-duplex	
LED indicator	System: MGM, Console, LNK/ACT, PWR ON x2, PWR FAIL x2, FAN FAIL x2	
Management	Console, Web, SNMP v1/v2c	
SNMP Trap	Cold Start, MC copper link up/down, MC fiber link up/down.	

3.3 PHYSICAL SPECIFICATIONS:

Dimensions:

440 x 350 x 88mm (W x D x H), 2U height

Weight:

7kg

Front Panel:



Figure 1: MC-1610MR / MC-1610MR48 front panel

Rear Panel:

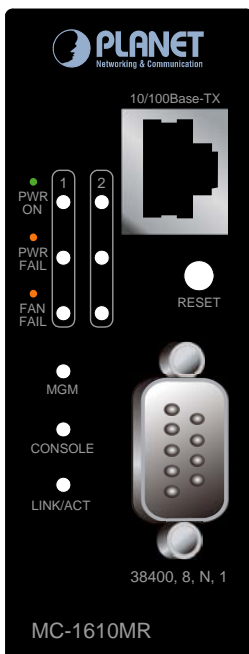


Figure 2: MC-1610MR rear panel



Figure 3: MC-1610MR48 rear panel

LED definition



LED	Color	LED Status	Function
PWR ON	Green	Lights On	Indicate that the device has power.
		Lights Off	Indicate that the device not receive power.
PWR FAIL	Amber	Lights On	Indicate that power is inserted and failed to work.
		Lights Off	Indicate that power is inserted and work normal.
FAN FAIL	Amber	Lights On	Indicate that fan is failed to work.
		Lights Off	Indicate that fan is work normally.
MGM	Green	Light blink	Indicate that CPU is working.
		Light Off	Indicate that CPU is not working.
CONSOLE	Green	Light blink	Indicate that console port is working.
		Light Off	Indicate that console port is not working.
LNK/ACT	Green	Light On	The link through that port is successfully established.
		Light Off	The link through that port is not established or run at 10Mbps half / full duplex mode.

3.4 ENVIRONMENTAL SPECIFICATION

Operating:

- Temperature: 0°C ~ 50 degree C
- Relative Humidity: 5% ~ 95% (non-condensing)

Storage:

- Temperature: -40°C ~ 70 degree C
- Relative Humidity: 5% ~ 95% (non-condensing)

3.5 ELECTRICAL SPECIFICATION

Input Voltage: 100~240V AC, 1A, 50/60Hz (MC-1610MR)
DC -48V, 2A (MC-1610MR48)

Power Consumption:

- With MC-RPS-130
 - 10 Watts / 34 BTU (1 x power supply , not include converters)
 - 46.9 Watts / 160 BTU (Full loading)
- With MC-RPS-48
 - 5.3 Watts / 18 BTU (1 x power supply, not include converters)
 - 96 Watts / 327 BTU (Full loading)

3.6 REGULATORY COMPLIANCE

FCC Class A, CE.

3.7 REALIABILITY

MTBF > 50,000 hrs @ 25 degree C

3.8 BASIC PACKAGING

Managed Media Converter Chassis with one power supply installed x1
User's manual CD x1
Quick Installation Guide x1
RS-232 console cable x1
Power Cord x1
Two Rack-Mounting Brackets with attachment screws

3.9 PACKING DIMENSION

Dimension: 545 mm (W) x 475 mm (D) x 210 mm (H)

Weight: 8.58 KG (Gross Weight)