

# 16-Slot Managed Media Converter Chassis with Redundant Power Supply System



## *Highly Flexible and Remote Manageable Fiber-Optic Networking for FTTx, ISP MAN / LAN, Enterprise and Campus*

For powerful advanced fiber-optic function and cost effective solution, PLANET releases new Managed Media Converter Chassis series- MC-1610MR / MC-1610MR48 which provide 16 media converter slots and one management system in a 19"-rack chassis. The MC-1610MR series is designed for FTTx applications by ISPs, telecoms, campuses and enterprises.

The MC-1610MR series helps to easily build the FTTx installation and perfectly satisfy diverse demands. The 16 slots can be flexibly applied with PLANET Fast / Gigabit Ethernet Smart Media Converter (FST-8 / GST-7 / GST-8 series) to construct network solution of FTTH (Fiber to the Home), FTTB (Fiber to the Building) or FTTC (Fiber to the Curb) for ISPs, enterprises and campuses. The MC-1610MR series is a reliable and efficient solution for network application where distance and installation budget are highly concerned.

## *Diversified Central Management*

The management function provided by MC-1610MR series enables network administrators to monitor Media Converter connection status and configure the Converter remotely via Web browser or locally via an RS-232 console port. Through the management interface, the entire status of the converters such as link on/off or statistics of the port will be clearly demonstrated and monitored. The MC-1610MR series is ideal for telecom and corporate applications where a number of fiber links need to be managed and controlled from a central location.

## *Extremely Reliable Design to ensure continuous operation*

**Power Redundant** – The MC-1610MR series supports the optional hot-swappable **Redundant Power System (RPS) to ensure continuous operation**. The MC-1610MR equips with one 100~240V AC power supply unit and MC-1610MR48 equips with one DC -48V power supply unit on their standard package. To enhance the reliability, both MC-1610MR and MC-1610MR48 provide one spare power supply unit slot for optional 100~240V AC or DC -48V redundant power supply installation. 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 makes the MC-1610MR series Media Converter Chassis 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 rapid recover automatically, such as ISPs, telecom, hospitals, banks and enterprises. If the master converter link is down, it forwards the packet to the slave converter's port of the backup pair.

**Temperature and FAN Status Monitoring** - The Managed Media Converter Chassis is equipped with temperature sensor and cooling fans to ensure reliable operation. Whenever the abnormal temperature is detected or cooling fan stops service, the Managed Media Converter Chassis would display related information on the Web management interface. Therefore, it helps the administrator to efficiently manage the media conversion operation.

## *Flexibility and Extension*

The MC-1610MR series Media Converter Chassis allows the connection of up to sixteen PLANET Smart Fast / Gigabit Ethernet Converter in one chassis. With an independent power supply on each slot of the MC-1610MR series, any converter is hot-swappable without causing an interruption to other converters. Each bay of the Media Converter Chassis can be populated with PLANET's Smart Media Converters. The PLANET FST and GST Series Smart Media Converters 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 series to provide space efficient and cost-effective scalable solution even when the network scale grows.

## KEY FEATURES

### HARDWARE

- High quality 19" Rack-Mountable Chassis installation
- Supports up to sixteen hot-swappable slide-in modular Media Converter
- Supports the PLANET Fast Ethernet and Gigabit Ethernet Smart Media Converter series- 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
- 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 event

- 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

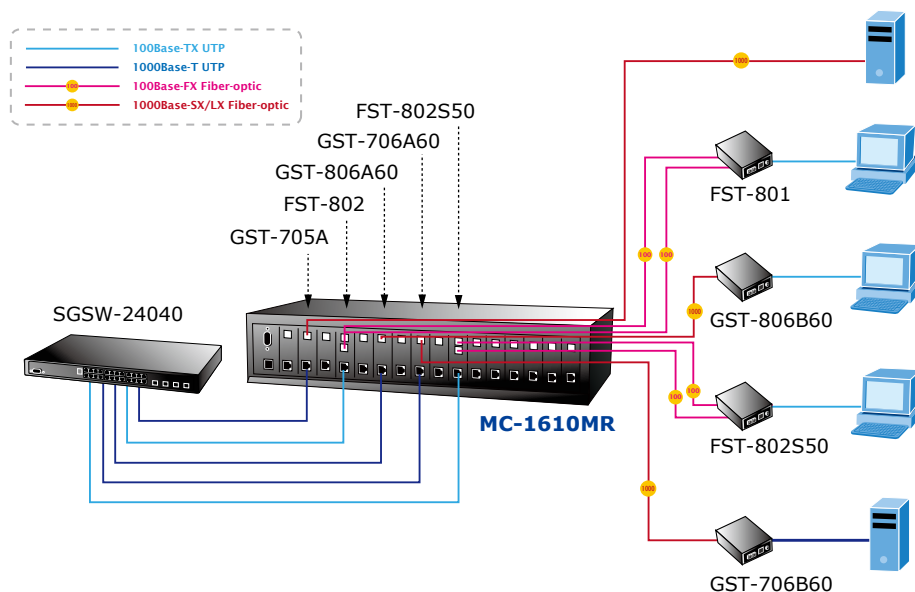
### CONVERTER MANAGEMENT

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

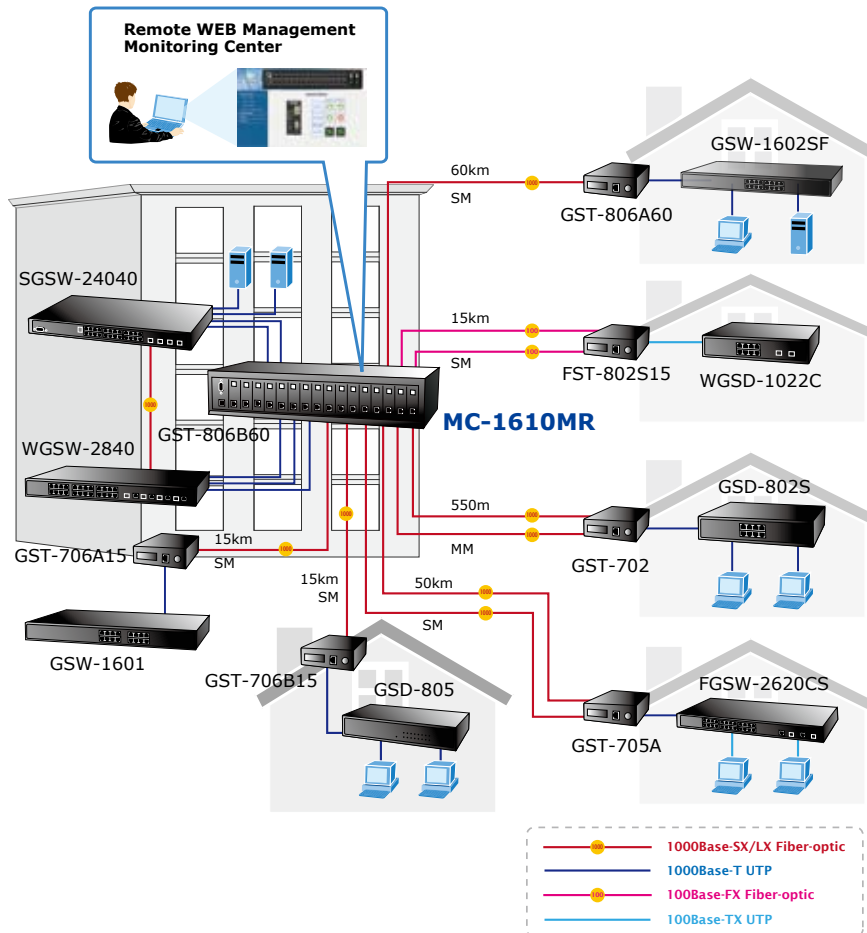
## APPLICATIONS

### Centralized Media Converter Management

The PLANET MC-1610MR / MC-1610MR48 provide advanced Media conversion technology afforded to fill the demand of current network growing and expanding. The Managed Media Converter Chassis allows installation of up to sixteen PLANET FST-8 / GST-7 / GST-8 series Fast / Gigabit Ethernet Smart Media Converters with diverse options of fiber connect type to meet different network applications. It is very flexible for FST-8 / GST-7 / GST-8 media converter series being installed in the MC-1610MR series for centralized media conversion management. The optional redundant power supply system also ensures non-stop reliable operation.



The MC-1610MR series is designed with hot swappable slot and provides redundant link function to avoid entire network down. The PLANET Managed Media Converter Chassis with FST-8 / GST-7 GST-8 series Fast / Gigabit Ethernet Smart Media Converters are ideal solution for building a reliable network solution of FTTC (Fiber to the Curb) and FTTB (Fiber to the Building) for ISPs, campuses and enterprise.



## SPECIFICATION

Product	16-Slot Managed Media Converter Chassis with Redundant Power Supply System	
Model	MC-1610MR	MC-1610MR48
<b>Hardware Specification</b>		
Dimension (W x D x H)	440 x 88 x 350 mm, 2U	
Slot	16 open Slot ( 15 x 80 x 26mm, W x D x H) 2 power slots (one fixed, one vacant )	
Weight	7kg	
Power requirement	100-240V AC, 1A, 50-60Hz	DC -48V , 2A, Range: -40V ~ -60V
Power Output	5V DC per slot, 2A maximum	
Power consumption	10 Watts / 34BTU (1 x power supply, not include converters)	5.3 Watts / 18BTU (1 x power supply, not include converters)
	46.9 Watts / 160 BTU ( Full loading)	96 Watts / 327 BTU ( Full loading)
Operate environment	0~50 Degree C, 5~90%RH	
Storage environment	-20~70 Degree C, 5~90%RH	
Emission	FCC Class A, CE mark	
<b>Management Interface</b>		
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.	

## ORDERING INFORMATION

MC-1610MR	16-Slot Managed Media Converter Chassis(AC power)
MC-1610MR48	16-Slot Managed Media Converter Chassis(DC power)
MC-RPS90	90W Redundant Power Supply, 100-240V AC
MC-RPS48	Redundant Power Supply, DC -48V

## RELATED PRODUCTS

<b>Smart Fast Ethernet Media Converter</b>	
FST-801	10/100Base-TX to 100Base-FX(ST,MM) Smart Media Converter-2km
FST-802	10/100Base-TX to 100Base-FX(SC,MM) Smart Media Converter-2km
FST-802S15	10/100Base-TX to 100Base-FX(SC,SM) Smart Media Converter-15km
FST-802S35	10/100Base-TX to 100Base-FX(SC,SM) Smart Media Converter-35km
FST-802S50	10/100Base-TX to 100Base-FX(SC,SM) Smart Media Converter-50km
FST-806A20	10/100Base-TX to 100Base-FX(WDM,SM) Smart Media Converter- TX:1310nm-20km
FST-806B20	10/100Base-TX to 100Base-FX(WDM,SM) Smart Media Converter- TX:1550nm-20km
<b>Smart Gigabit Ethernet Media Converter</b>	
GST-702	1000Base-T to 1000Base-SX(SC,MM) Smart Media Converter-220m/550m
GST-702S	1000Base-T to 1000Base-LX(SC,SM) Smart Media Converter-10km
GST-705	1000Base-T to 1000Base-LX(LC,MM) Smart Media Converter-220m/550m
GST-705A	1000Base-T to 1000Base-LX/SX(mini-GBIC, SFP) Smart Media Converter-distance depend on SFP module
GST-706A15	1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1310nm-15km
GST-706B15	1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1550nm-15km
GST-706A60	1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1310nm-60km
GST-706B60	1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1550nm-60km
GST-802	10/100/1000Base-T to 1000Base-SX(SC,MM) Smart Media Converter-220m/550m
GST-802S	10/100/1000Base-T to 1000Base-LX(SC,SM) Smart Media Converter-10km
GST-805	10/100/1000Base-T to 1000Base-LX(LC,MM) Smart Media Converter-220m/550m
GST-805A	10/100/1000Base-T to 1000Base-LX/SX(mini-GBIC, SFP) Smart Media Converter-distance depend on SFP module
GST-806A15	10/100/1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1310nm-15km
GST-806B15	10/100/1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1550nm-15km
GST-806A60	10/100/1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1310nm-60km
GST-806B60	10/100/1000Base-T to 1000Base-LX(WDM) Smart Media Converter-TX:1550nm-60km

\* Remark: Distance up to 100 km is available upon request