Media Conversion



Centralized Media Converter Management

PLANET Media Converter Chassis allows the installation of up to 15 PLANET standard Media Converters with diverse choices, such as fiber, GEPON, Ethernet, PoE, serial RS232/485 interfaces, VDSL2 and video to meet different network applications. It is very flexible for Media Converter series to be installed in the chassis for centralized media conversion management.

Web/SNMP/OAM Remote Management

For efficient management, the Managed Media Converters are equipped with remote Web interface. They also support the standard SNMP and TS-1000/802.3ah OAM protocol and can be managed via any standard management software.





Extension & Expansion

With the feature-rich chassis, the converters can easily expand the fiber-optic networks by simply plug and play. The wiring distance of PLANET Media Converter Chassis is extendable from 2 to 120 kilometers, and the Media Converter transmission distance is up to 120 kilometers.

Easy Installation



DIN-rail Installation



Chassis Installation



Wall-mount Installation

With standard cases, PLANET Media Converters provide a 3-way installation, including DIN rail, chassis and wall mount, to manage all devices more efficiently.

Environmentally Hardened Design

The Industrial Media Converter Series is equipped with the slim-type IP30 metal case for easy deployment in heavy Industrial demanding environments. Being able to operate under the temperature range from -40 to 75 degrees C, the Industrial Media Converter Series can be placed in almost any difficult environment.



Managed Media Converter Chassis



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

The MC-1610MR/MC-1610MR48 helps to easily build the FTTx installation and perfectly satisfies diverse demands. The 16 slots can be flexibly applied with PLANET Fast/Gigabit Ethernet Smart Media Converter (FST-8/GST-8/XST 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/MC-1610MR48 is a reliable and efficient solution for network application where distance and installation budget are highly concerned.

- · High-quality 19" rack-mountable chassis installation
- . Bay power isolation ensures each bay is electrically isolated from each other
- · Installation of up to two fans for increased air-flow for system cooling
- One 10/100/1000Mbps Ethernet port and one RS232 port for management
- · LED indicators for system, power and fan status
- · NTP client (Time zone setting)
- · Remote syslog and local system log
- · DHCP client and DNS client
- · Temperature detects display and alarm
- · Web firmware upgrade
- · PLANET Smart Discovery Utility for deployment management
- · Media link/connection speed duplex status for each converter module
- · Redundant backup system (Redundant Link Media Converter)

MC-1610MR

- management Two power slots for redundant power, optional AC/-48V DC supplies

MC-1610MR48

- management
 16 hot-swappable modular converter
- Two power slots for redundant power, optional AC/-48V DC supplies

Web/SNMP management

- OAM
- · Device Control
- · Redundant Link
- · Link Status Monitoring
- · SNMP Trap Alarm



Hot-swappable/flexible power input



Dual AC



Dual DC



DC + AC

Power Module

Smart Gigabit Media Converters



PLANET GST-80x Smart Gigabit Media Converter series extends communication distance with high Gigabit performance via fiber optic cable. The GST-80x series provides media conversion between 10/100/1000BASE-T and 1000BASE-SX/LX interfaces such as multimode LC/SC connectors (220m/550m), single-mode LC/SC connectors (10/20/40/80/120km) and single fiber connectors (WDM,20/60km) for various fiber optic applications.

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-SX/LX Ethernet standard
- Choice of fiber connectors from SC, LC, WDM, multi-mode/ single-mode fiber/1000BASE-SX/LX mini GBIC module
- · Auto MDI/MDIX on TP port
- · LLR /LLCF for fiber connection diagnostic
- IEEE 802.3ah OAM/TS-1000 OAM
- Manageable through MC-1610MR/MC-1610MR48
- LED indicators for converter status
- 9K jumbo frame size supported
- · DIP switch for fiber (auto-negotiation/manual) and LFP function (disable/enable) setting
- · EMI standards complies with FCC, CE class A

Smart Fast Ethernet Media Converters



PLANET Smart Fast Ethernet Media Converter, FST-80x series, extends communication distance with highly-stable performance via fiber optic cable. The FST-80x series provides media conversion between 10/100BASE-TX and 100BASE-FX interfaces such as multi-mode ST/SC connectors (2km), single-mode SC connector (15/35/50km), single fiber connector (WDM, 20km) and fiber connection options for various applications.

- · Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX and 100BASE-FX Ethernet standard
- One 10/100BASE-TX port with RJ45 connector, one 100BASE-FX port with ST/SC/WDM connector supporting multi-mode or single-mode fiber optic cable
- · Auto MDI/MDIX on TP port
- · LLR/LLCF for fiber connection diagnostic
- Manageable through MC-1610MR/MC-1610MR48
- · LED indicators for converter status
- DIP switch to set fiber (HDX/FDX), UTP (auto-negotiation/manual), speed (10/100Mbps), duplex mode (half/full duplex mode), LLR (disable/enable), LLCF (disable/enable), flow control (disable/enable) and LFP function (disable/enable)
- · EMI standards complies with FCC, CE class B

GST-802

GST-802S

- One 1000BASE-LX port with SC connector
 Supports fiber optic up to 20km

GST-805A

- Supports fiber optic up to 120km (Vary on SFP module)

GST-806A15

- One 1000BASE-LX port with WDM connector
 Supports fiber optic up to 20km

GST-806B15

GST-806A60

GST-806B60

- One 1000BASE-LX port with WDM connector
 Supports fiber optic up to 60km

FST-801

FST-802

FST-802S15

FST-802S35

FST-802S50

FST-806A20

FST-806B20

Smart 10Gigabit Media Converters



With target applications including 1Gbps, 2.5Gbps, 5Gbps and 10G Ethernet switching, PLANET XST-705A Smart 10Gigabit Media Converter is ideal for wide applications for copper to fiber media conversion wherever 10Gigabit bandwidth is required.

The XST-705A has one RJ45 port and one SFP+ slot. It supports 10Gigabit Ethernet conversion from copper 10GBASE-T to fiber multi-mode or single-mode, utilizing 10GBASE-SR or 10GBASE-LR SFP+ transceiver installed in the SFP+ slot to extend distances to server switches and patch panels. The deployment distance can be extended from 300 meters (multi-mode) to up to 80 kilometers (single-mode).

The XST-705A is designed for use in network environments where the ultra-high bandwidth provided by 10Gigabit Ethernet is required, for example, data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

Media Converter Chassis



Offering more capacity to the converters in one chassis, PLANET MC-700/MC-1500 provides 7/15 slots in the 10"-19" rack saving more spaces for fiber-optic wiring yet simplifying the maintenance of media conversion. It allows the connectivity of up to 7-/15-slot PLANET Fast Ethernet, Gigabit Ethernet or VDSL2 Converters in one chassis. One fan with LED indicators for the system cooling is also available.

Providing redundant power to gain more reliable media conversions, the MC-1500R/MC-1500R48 offers 15 slots for PLANET's full-ranging Media Converter series and 2 slots for 130W or DC -48V redundant power supply. It allows the connectivity of up to 15 PLANET Fast Ethernet, Gigabit Ethernet or VDSL2 Converters in one chassis. Two fans with LED indicators for the system cooling are also available.

The MC-700, MC-1500, MC-1500R and MC-1500R48 offer flexibility in installation and costeffective scalable solution. With an independent power supply on each slot of the MC-700, MC-1500, MC-1500R and MC-1500R48, any converter is hot-swappable without causing an interruption to other converters. The Media Converters and power modules can be plugged and played anytime. Each bay of the Media Converter Chassis can be populated with any of PLANET's Media Converter series, the FT, GT, VC-23x and ICS, which provide media conversion between fiber optic, phone wire and serial to copper lines.

- · High-quality 10"/19" rack-mountable chassis installation
- · Bay power isolation ensures each bay is electrically isolated from each other
- · Power protection: protection from over voltage, over current and short circuit
- · One/two built-in fans for hardware cooling
- · Supplies the converters and power modules to be plugged and played
- · Reduces the effort of converter maintenance and management and diagnose the status at one time
- FCC Part 15 Class A, CE

XST-705A

- Low power consumption Manageable through MC-1610MR/MC-

MC-700



MC-1500



MC-1500R

- One AC 100-240V power input
 Redundant power supply with option of 100-240V AC or -48V DC

MC-1500R48



MC-1500R Rear Panel

10G Media Managed Converters





PLANET XT-900 series high-performance media converter improves network connectivity and provides sophisticated management capabilities. It is the first 10G media converter in the industry with standalone secure management, making it the best option for enterprise and telecom remote management and monitoring. The XT-900 series allows for remote management via an intuitive web interface, command line interface (CLI) and SNMP protocol, enabling easy monitoring and configuration of the converter from anywhere.

Our cutting-edge converter features one 10GBASE-T copper port and two 10G SFP+ ports, providing ultra-fast connectivity for devices with RJ45 interfaces as well as greater flexibility in fiber-optic cabling options. This powerful yet compact solution makes it the ideal choice for businesses looking to boost their network speed and functionality.

XT-905A

XT-915A

- Feature

 Support the IEEE 802.1Q VLAN standard

 Web, CLI and SNMP management

 Supports ITU-G.8032 Ethernet Ring

XT-925A

- Support the IEEE 802.1Q VLAN standard Web, CLI and SNMP management Supports ITU-G.8032 Ethernet Ring Protection Switch (ERPS)

10G Ethernet Media Converter



With target applications including 1Gbps, 2.5Gbps, 5Gbps and 10G Ethernet switching and aggregation, PLANET IXT and XT 10G Media converter series is ideal for wide applications for copper to fiber media conversion wherever 10Gigabit bandwidth is required.

The IXT and XT series has one RJ45 port and one SFP+ slot. It supports 10Gigabit Ethernet media conversion from copper 10GBASE-T to fiber multi-mode or single-mode, utilizing 10GBASE-SR or 10GBASE-LR SFP+ transceiver installed in the SFP+ slot to extend distances to servers, switches and patch panels. The deployment distance can be extended from 300 meters (multi-mode) to up to 80 kilometers (single-mode).

The IXT series is designed for use in network environments where the ultra-high bandwidth provided by 10Gigabit Ethernet is required, for example, data center cloud computing, enterprise backbones, campus networks, and carrier infrastructure.

XT-705A

10G SFP+ NBASE-T

XT-715A

- Complies with IEEE 802.3ae 10GBASE-R NBASE-T featuring adaptive rate operation

- Low power consumption
 Compact size; compatible with MC-700/

IXT-705AT

10G SFP+ NBASE-T

Gigabit Managed Media Converters



PLANET GT-91x series provides much flexibility with all kinds of 10/100/1000Mbps Ethernet Media on RJ45 port and offers highly stable Gigabit fiber performance. It supports conversion between 10/100/1000BASE-T and 1000BASE-LX/SX network, which includes SFP/WDM connectors with single-mode or multi-mode media as required.

For efficient management, PLANET GT-91x Managed Gigabit Ethernet Media Converter series is equipped with remote Web/SNMP interface. With its built-in Web-based management, PLANET GT-91x series acts as an easy-to-use, platform-independent management and configuration facility.

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, 100BASE-FX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-SX/LX
- Choice of fiber connectors: LC, WDM, multi-mode/single-mode
- · LED indicators for easy network diagnostics
- Auto MDI/MDIX on TP port
- IP-based web interface
- SNMP v1/v2c monitor
- 802.1Q/Q-in-Q/Management VLAN
- Maximum frame size up to 16K bytes
- TS-1000 OAM/IEEE 802.3ah OAM/Loop Back Test
- Compact in size, easy installation
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)

Gigabit Media Converters



For the flexibility of all kinds of 10/100/1000Mbps Ethernet Media on RJ45 port and highly-stable Gigabit fiber performance, PLANET GT-802, GT-802S, GT-805A and GT-806A/B series and GT-1205A Gigabit Ethernet Media Converter extend communication distance with Gigabit performance via fiber optic cable. The GT-80x series and GT-1205A provide media conversion between 10/100/1000BASE-T and 1000BASE-SX/LX interfaces for various fiber optic applications.

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX, IEEE 802.3ab 1000BASE-T, IEEE 802.3z 1000BASE-SX/LX
- IEEE 802.3x full-duplex flow-control and back-pressure in half-duplex eliminate the loss of packets
- · Auto MDI/MDIX on TP port
- 9K jumbo frame
- OAM terminal (TS-1000 and IEEE 802.3ah)
- LED indicators for easy network diagnostics
- External 5V/2A DC power supply
- · Wall mounting and DIN-rail supported
- · Compact in size, easy installation
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)

GT-915A

GT-802/GT-802S

GT-805A

GT-806A15/GT-806B15

GT-806A40/GT-806B40

GT-806A60/GT-806B60

GT-1205A

GT-805A-PD

Gigabit PoE Media Converters



As more demand for PoE powered devices needs higher power input and long distance transmission, PLANET GTP-805A/GUP-805A-60W/GUP-805A-95W PoE Media converter series is an ideal solution for this kind of PoE applications.

The GTP-805A IEEE 802.3at PoE+ media converter supports a maximum of 30-watt PoE output. The GUP-805A-60W and GUP-805A-95W IEEE 802.bt PoE++ are capable to source up to 60 watts and 95 watts of power by using all the four pairs of standard Cat5e/6 Ethernet cabling to deliver power and full-speed data to each remote PoE-compliant powered device (PD).

With complete power budget solutions of 30 watts ,60 watts and 95 watts for different kinds of PoE applications, the GTP-805A, GUP-805A-60W and GUP-805A-95W provide a quick, safe and 802.3at PoE+/802.3bt PoE++ network solution for small businesses and

GTP-805A

GUP-805A-60W

GUP-805A-95W

Fast Ethernet Media Converters



PLANET FT-80x series is a Fast Ethernet Bridge 100BASE-FX fiber to 10/100BASE-TX shielded twisted pair (STP) converter. It supports both half-duplex and full-duplex operations and a variety of fiber options. The converter automatically adapts to the highest level of performance supported by the device connected to the STP port.

- · Complies with IEEE 802.3, IEEE 802.3u 10/100BASE-TX, 100BASE-FX
- IEEE 802.3x full-duplex flow-control and back-pressure in half-duplex eliminate the loss of packets
- · Auto MDI/MDIX on TP port
- · Rear DIP switch for FX duplex mode selection
- · Side DIP switch for LFP mode selection
- · LED indicators for easy network diagnostics
- · External 5V/2A DC power supply
- · Wall mounting and DIN-rail supported
- · Compact in size, easy installation
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)

FT-801

FT-802

FT-802S15

FT-802S35/FT-802S50

- Supports fiber optic up to 35kmSupports fiber optic up to 50km

FT-806A20/FT-806B20

FT-806A60/FT-806B60

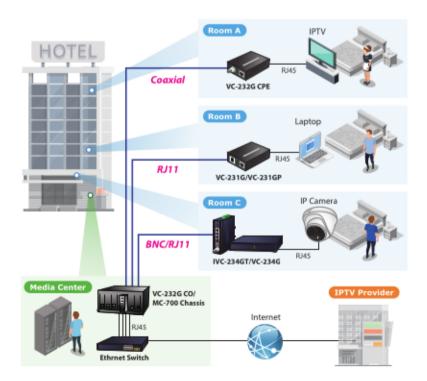
VDSL2 Media Converters



PLANET VC series is Ethernet-over-VDSL2 Media Converter with high performance. It is based on two core networking technologies, Ethernet and VDSL2 (Very-high datarate Digital Subscriber Line 2). The VDSL2 technology offers the absolutely fastest data transmission speeds over the existing copper telephone lines without the need of rewiring.

The VC series can be used as a standalone unit when powered by its DC adapter or used as a slide-in module to PLANET 10-/19-inch 7-/15-slot Media Converter Chassis (MC-700/MC-1500/MC-1500R/MC-1500R48).

- Complies with IEEE 802.3 10BASE-T, IEEE 802.3u 100BASE-TX and IEEE 802.3x flow control Ethernet standards
- · CO/CPE selectable via DIP switch
- · DMT (Discrete Multi-Tone) line coding
- IEEE 802.1Q VLAN tag transparent, 1536 bytes packet size support
- LED indicators for easy network diagnostics
- · External DC 5V 2A power supply
- · Wall mounting and DIN-rail supported
- Compact in size, easy installation
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)



VC-231

VC-231G/VC-231GP

- CO/CPE mode selectable via DIP switch
 Selectable target band plan and SNR margin
 30-watt 802.3at PoE+ PSE (VC-231GP)

VC-232G

- Upstream/Downstream bandwidth up to 200/100Mbps

VC-234G/IVC-234GT

- -40 to 75 degrees C operating temperature (IVC-234GT)

VC-231GF

- Selectable target band plan and SNR margin

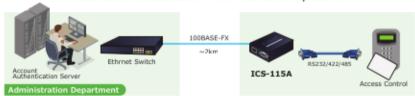
Serial over Ethernet Media Converters



PLANET ICS-10x Media Converter/Device Server series can convert Serial RS232/RS422/ RS485 communication interface over Fast Ethernet networking. There are RJ45 and SC type connectors and single-mode/multi-mode media for customers' needs. Ethernet signal allows two types of segments to connect easily and efficiently.

- · Complies with IEEE 802.3, IEEE 802.3u 10/100BASE-TX, 100BASE-FX standard
- · Choice of fiber connectors: SC/LC, multi-mode/single-mode fiber
- · IP-based web interface
- · SMTP e-mail for alarm notification of events
- · LED indicators for easy network diagnostics
- · PLANET Smart Discovery utility finds ICS-10x devices on the network automatically
- · Firmware upgrade via HTTP protocol
- · Reset button on the front panel for reset to factory default
- · Wall mounting and DIN-rail supported
- · Compact in size, easy installation
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)

Standalone Installation - Device Gateway Server





ICS-110

- One DB9 interface supports RS232, 2-wire
 RS485, 4-wire RS485 and RS422 operation
- 1-port 10/100BASE-TX RJ45 interface with auto MDI/MDI-X function

ICS-115A

- One DB9 interface supports RS232, 2-wire
 PS485, 4 wire PS485, and PS422 appreciant
- 1-port 100BASE-FX SFP slot

ICS-120

- Two DB9 interfaces support RS232, 2-wire RS485, 4-wire RS485 and RS422 operation
- 1-port 10/100BASE-TX

RS422/RS485 Modbus Gateway



PLANET MG-11x/MGS-12x 1/2-port RS232/422/485 Modbus Gateway supports converting any Modbus Protocols between Modbus TCP, Modbus RTU, and Modbus ASCII for all supported hardware interfaces. Its serial protocol can be used for industrial automation where SCADA or HMI system is in place, which brings interconnection over Ethernet longer distances, thus making a network infrastructure more flexible.

- Complies with IEEE 802.3, IEEE 802.3u 10/100BASE-TX, 100BASE-FX Standard
- 10/100TX BJ45 and 100EX SEP Interfaces
- · Built-in IP-based Web interface
- Modbus TCP, Modbus RTU, Modbus ASCII, IP, ARP, DHCP and DNS
- · RTU Master, RTU Slave, ASCII Master, and ASCII Slave serial operation modes
- · Master mode supports 32 slave TCP connection requests
- · Slave mode supports 32 TCP master connections
- Firmware upgrade/configuration backup and restore via HTTP protocol
- · Reset button for resetting to factory default
- Wall-mount or DIN-rail installation
- -10 to 60 degrees C operating temperature
- 10-/19-inch chassis compatibility (MC-700/MC-1500/MC-1500R/MC-1500R48)

Video over Fiber Optic Converters





PLANET has developed the video over Gigabit fiber media converter kit, VF-101G/102G/106G/402-KIT, which is ideal for extending the distance and signal conversion by transmitting the AHD/CVI/TVI/CVBS video and data over the fiber-optic cable.

The VF-10xG series and VF-402 include different types of fiber connectors such as ST, FC and WDM-SC which enable CCTV applications to replace the traditional coaxial cable with stable fiber cable performing more efficiently.

Adopting the intelligent encoding/decoding technology and with the compact box, the VF-10xG-KIT video over fiber media converter series enables videos to be delivered in high quality over a distance of up to 20km long.

- · High-speed synchronous digital transmission technology
- 8-/10-bit digital video signal sampling
- Data type: RS485
- PAL, NTSC, SECAM compatible
- Long-distance data transmission of 20km
- · Guarantees safe transmission under poor electromagnetic environment
- · Compliant with hybrid video (AHD/TVI/CVI/CVBS)
- · Compact size, wall mounting and DIN-rail supported, easy installation
- Standalone or work with PLANET MC-700/1500/1500R media converter chassis (For VF-10XG series)

MG-110

- 1-port 10/100BASE-TX RJ45 with auto MDI/MDI-X function

MG-115A

MG-120

- Two DB9 interfaces support RS232, 2-wire RS485, 4-wire RS485 and RS422 operation

VF-101G-KIT

VF-102G-KIT

VF-106G-KIT

- Wide temperature range from -25 to 70 degrees C

VF-402-KIT