

10/100Base-TX to 100Base-FX Smart Fast Ethernet Media Converter (OAM Support)



To provide an easy use yet powerful solution for FTTX applications, PLANET releases a new 10/100Base-TX to 100Base-FX Smart Media Converter, FST-81x series, featuring plug & play and smart media conversion functions.

Distance Extension with High Performance and Steady Network Communication

The PLANET Smart Fast Media Converter- FST-81x series extends communication distance with highly stable performance via fiber optical cable. The FST-81x 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-mode LC connectors (2/20/40/60km) and single fiber connector (WDM,20km) fiber connection options for various application.

Easy Installation

The FST-81x series allows two easy types of connection. These Smart Media Converters can be used as a standalone unit when powered by its DC adapter or used as a slide-in module to the PLANET 19-inch Web Smart / Managed 16-Slots Media Converter Chassis (MC-1600MR/MC-1600MR48 & MC-1610MR / MC-1610MR48). When working with the Web Smart / Managed Media Converter Chassis, the FST-81x is able to be centrally managed and its status be monitored through the local RS-232 console and remote web interface.

Enhanced Smart Management Features

The FST-81x series provides Auto MDI/MDI-X on its TP port and the DIP switch to configure available smart functions including the flow control / Link Pass Through function (LLCF/LLR). The Flow Control function allows FST-81x supported routers and servers to directly connect to FST-81x for fast, reliable data transfer.

The Link Loss Carry Forward (LLCF) function works with Link Loss Return (LLR) to diagnose network connections. Furthermore, the LLR function can immediately alarm network administrator the media link issue and provide efficient solution to monitor the entire network.

Ingress / Egress bandwidth control function support on both TP and Fiber interface of FST-81x to enhance bandwidth utilization, Before FST-81x power outage situation appears, the new Dying Gasp feature enables network administrator to receive message from FST-81x and get information about FST-81x loss power for further check and restore.

Moreover, when FST-81x is installed into MC-1610MR / MC-1610MR48 Managed Media Converter Chassis, the TS-1000/802.3ah OAM protocol (operations, administration, and maintenance) function helps remote device be centrally managed and monitored under Managed Media Converter Chassis Web interface.

KEY FEATURES

STANDARDS

- Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3u 100Base-FX Ethernet Standard

INTERFACE

- One **10/100Base-TX** port with RJ-45 connector
- One **100Base-FX** port with LC/SC/WDM connector supporting multi-mode or single-mode fiber optic cable
- Auto-Negotiation and Auto-MDI / MDI-X for 10/100Base-TX port

LAYER 2 FEATURES

- Back-Pressure & IEEE 802.3x compliant flow control and full wire-speed forwarding rate
- Link Loss Return (**LLR**) switch on each fiber optic to aid in troubleshooting remote network connections
- Link Loss Carry Forward (**LLCF**) work with LLR in diagnosing network connections

SMART MANAGEMENT

- Provides DIP switch for Flow control (Disable / Enable) and LFP function (Disable / Enable) setting
- Manageable through Web Smart / Managed Media Converter Chassis System (MC-1600MR/MC-1610MR series)
- Bandwidth control / TS-1000 OAM / IEEE 802.3ah OAM / Loop Back Test** function provided with MC-1610MR / MC-1610MR48 Managed Media Converter Chassis System
- Dying Gasp feature support** (FT-90x series Web Smart Fast Ethernet Converter can receive Dying Gasp message sent out by FST-81x)

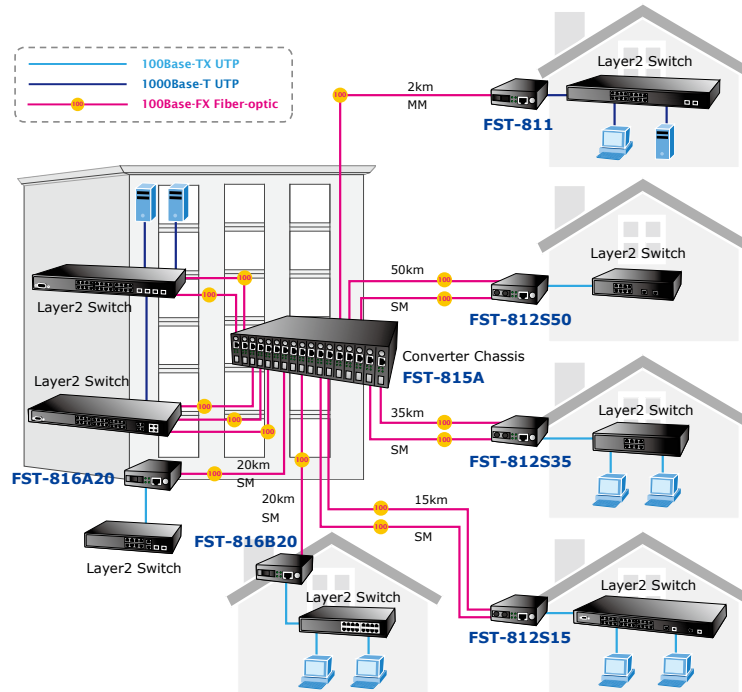
HARDWARE

- Act as a standalone device or work with Web Smart / Managed Media Converter Chassis for up to 16 converters with redundant power supply for use of optional expansion
- LED indicators for converter status
- Choice of fiber-connector from SC, LC, WDM, multi-mode / single-mode fiber / 100Base-FX mini GBIC module
- EMI standards complies with FCC, CE class B

APPLICATIONS

Fiber-Optic Networking for ISP, Enterprise, and Home

The PLANET FST-81x provides advanced Media conversion technology- 10/100Base-TX and 100Base-FX interfaces to fulfill different kinds of demand followed with the growth and expanding of the current network. The FST-81x provides diverse fiber connector types for different network applications. It is very flexible for the FST-81x working as a standalone device or being installed in the central Web Smart / Management Media Converter Chassis for centralized management. When working with the Web Smart / Management Media Converter Chassis, the FST-81x is hot swappable to avoid network downtime. The FST-81x is the ideal solution to build a network solution of FTTH (Fiber to the Home) or FTTC (Fiber to the Curb), and FTTB (Fiber to the Building) for ISPs, campuses and enterprises.



SPECIFICATION

Model	FST-811	FST-812	FST-815A	FST-812S15	FST-812S35	FST-812S50	FST-816A20	FST-816B20
Hardware Specification								
Standards	IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX and 100Base-FX							
Ports	1 10/100Base-TX port , 1 100Base-FX port							
Fiber connector	ST	SC	SFP	SC	SC	SC	SC, WDM	SC, WDM
Wavelength	1310nm (Transmit and Receive)						1310 (TX)	1550 (TX)
Deployment							1550 (RX)	1310 (RX)
Cable	10Base-T: 2-pair Cat. 3,4,5 UTP cable, up to 100 meters 100Base-TX: 2-pair Cat. 5 UTP cable, up to 100 meters 100Base-FX: 50/125µm or 62.5/125µm multi-mode fiber cable, up to 2km. 9/125µm single-mode cable, provide long distance for 2/15/20/35/40/50/60km							
Maximum Cable distance	MM,2km	MM, 2km	SM, 60km (MFB-F60)	SM, 15km	SM,35km	SM, 50km	SM, 20km Single wire	SM, 20km Single wire
LED indicator	System: PWR TP: LNK/ACT, 100 FX: LNK/ACT							
DIP switch	Flow control (Disable / Enable) , LFP function (Disable / Enable)							
Speed	Ethernet: 10/20Mbps for half / full-duplex Fast Ethernet: 100/200Mbps for half / full-duplex							
Jumbo frame size	9K Bytes							
Power input	DC 5V 2A							
Power consumption	2.8 Watts / 9 BTU (maximum)							
Dimension (W x D xH)	81 x 94 x 26 mm							
Weight	0.22kg							
Emission	FCC Class B, CE mark							
Environment								
Operating	Temperature: 0 ~ 50 Degree C Relative Humidity: 5% ~ 90%							
Storage	Temperature: -10 ~ 70 Degree C Relative Humidity: 5% ~ 90%							

ORDERING INFORMATION

<i>FST-811</i>	10/100Base-TX to 100Base-FX (ST,MM) Smart Media Converter-2km
<i>FST-812</i>	10/100Base-TX to 100Base-FX (SC,MM) Smart Media Converter-2km
<i>FST-815A</i>	10/100Base-TX to 100Base-FX Smart Media Converter (SFP)-up to 60Km
<i>FST-812S15</i>	10/100Base-TX to 100Base-FX (SC,SM) Smart Media Converter-15km
<i>FST-812S35</i>	10/100Base-TX to 100Base-FX (SC,SM) Smart Media Converter-35km
<i>FST-812S50</i>	10/100Base-TX to 100Base-FX (SC,SM) Smart Media Converter-50km
<i>FST-816A20</i>	10/100Base-TX to 100Base-FX (SC WDM,SM) Smart Media Converter- TX:1310nm-20km
<i>FST-816B20</i>	10/100Base-TX to 100Base-FX (SC WDM,SM) Smart Media Converter- TX:1550nm-20km

RELATED SFP MODULES FOR FST-815A

<i>MFB-FX</i>	SFP-Port 100Base-FX Transceiver (1310nm) -2KM
<i>MFB-F20</i>	SFP-Port 100Base-FX Transceiver (1310nm) - 20KM
<i>MFB-F40</i>	SFP-Port 100Base-FX Transceiver (1310nm) - 40KM
<i>MFB-F60</i>	SFP-Port 100Base-FX Transceiver (1310nm) - 60KM
<i>MFB-FA20</i>	SFP-Port 100Base-BX Transceiver (WDM,TX:1310nm) -20KM
<i>MFB-FB20</i>	SFP-Port 100Base-BX Transceiver (WDM,TX:1550nm) -20KM

RELATED PRODUCTS

<i>MC-1600MR</i>	16-Slot Web Smart Media Converter Chassis(AC power)
<i>MC-1600MR48</i>	16-Slot Web Smart Media Converter Chassis(DC power)
<i>MC-1610MR</i>	16-Slot Managed Media Converter Chassis(AC power)
<i>MC-1610MR48</i>	16-Slot Managed Media Converter Chassis(DC power)
<i>MC-RPS130</i>	130W Redundant Power Supply for MC-1600MR / MC-1610MR, 100-240V AC
<i>MC-RPS48</i>	Redundant Power Supply for MC-1600MR48 / MC-1610MR48, DC -48V