STMP-1205

Industrial Gigabit Media Converter

User's Manual

FCC Warning

This device has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of FCC Rules.   These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

CE Mark Warning

This is a Class A product.   In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Energy Saving Note of the Device

This power required device doesn't support Standby mode operation. For energy saving, please remove the power cable to disconnect the device from the power circuit. Without removing power cable, the device will consume power from the power source.

WEEE Warning

To avoid the potential effects on the environment and human health as a result of the presence of hazardous substances in electrical and electronic equipment, end users of electrical and electronic equipment should understand the meaning of crossed-out wheeled bin symbol. Do not dispose of WEEE as unsorted municipal waste; WEEE has to be collected separately.

Package Contents

Thank you for purchasing our STMP-1205 Industrial Gigabit Media Converter. Before installation, please check the contents of your package for the following parts:

1. STMP-1205 x 1
2. User's Manual x 1
3. DIN Rail bracket x 1
4. Screw for mounting bracket x 2
5. Earth ground wire x1
6. Rubber Feet x 4

Product Introductions

STMP-1205 is a rugged industrial gigabit media converter allows one Ethernet 10/100/1000Base-T UTP RJ-45 port to be inter-changeably converted to one 100/1000BASE-FX Fiber SFP port. With auto negotiation and auto MDI/MDIX, the RJ45 port is compatible to Gigabit Ethernet 10/100/1000Base-T interfaces.   For the fiber SFP port, the port speed of 100Mbps / 1000Mbps can be set by the dip switch on the front panel

STMP-1205 supports both switch mode and converter mode for user applications. In switch mode, it utilizes the "store & forward" architecture to handle packet transfer. It begins to forward a packet to a destination port after the entire packet is received. A received packet will be forwarded to the destination port only if it is error free. Otherwise, it will be discarded. In converter mode, the STMP-1205 directly forward packet to the destination port without checking CRC for lowest latency requirement. If the speeds of the RJ45 and the SFP ports are not the same, the converter mode will automatically switch to the "store and forward" scheme to handle packets.

With the Link Fault Pass-through (LFP) function, the STMP-1205 can monitor both the fiber and copper RX ports for loss of signal.   In case of a loss of RX signal on one media port, the converter will automatically disable the TX signal to the other media port, thus passing through the link fault.   It then sends out the far end fault (FEF) signal to stop sending link pulse to the link partner once a loss of the fiber RX signal is encountered. Then the link partner will synchronously stop sending data. FEF prevents loss of valuable data transmitted over invalid link. Combining the LFP and FEF troubleshooting features of STMP-1205, both end

devices can be notified of a loss of fiber link.

Key Features

- Complies with IEEE 802.3, 802.3u, IEEE802.3ab, 10/100/1000BASE-T, IEEE 802.3z 1000Base-FX
- Support Full/Half Duplex with Auto Negotiation
- Supports auto MDI/MDIX for RJ-45 port
- Supports Jumbo Frame (9Kbyte) Pass through for streaming video applications
- Supports auto Switch and Converter mode
- Support Local Fault Pass through (LFP)
- Supports SFP Multi Mode/Single Mode fiber plugs
- 2 Dip Switches for function settings
- Reset push button to activate new DIP Switches settings
- DIN Rail bracket

Hardware Installation

1. Connect RJ45 LAN port to the other Gigabit Ethernet Switch Port with a Category 5e Ethernet cable.
2. Connect the Fiber cable to the SFP Fiber port with an SFP Plug.
3. For Gigabit fiber link, set "ON" the Dip Switch#1 to select 1000Base-FX.
4. To enable the LFP function, set "ON" the Dip Switch#2.
5. Connect the Power Adaptor 5V/12V to the STMP-1205 DC Jack (back panel). Turn ON the AC Power. The LEDs SFP, DATA will be blinking and lit on.
6. The STMP-1205 will connect at Gigabit fiber link.

Front Panel

Rear Panel

Rack Mounting Installation

1. Attach rack-mount bracket to the side of STMP-1205 with supplied screws from package
2. Mount tightly the bracket of STMP-1205 to the rack.
3. Screw the Earth ground wire to the frame ground in the rear panel of STMP-1205 and connect to the Earth ground for lightning protection.

DIP Switches

DIP switches (DS#)	Function	Status	Description
1	SFP	OFF	Select 100Mbps for SFP Link
		ON	Select 1000Mbps for SFP Link
2	LFP	OFF	Disable LFP & FEF Function
		ON	Enable LFP & FEF Function

LED Indicators

LED	Color	Functions
PWR	Green	Lit when STMP-1205 power is ON
SFP	Green / Amber	Lit Green for fiber link at 1000Mbps
		Lit Amber for fiber link at 100Mbps
		Blinking for SFP fiber data activity
LFP	Amber	Lit when LFP/ FEF link loss event occurred, When LFP is enabled (DS#2 is ON)
DATA	Green / Amber	Lit Green for UTP link at 1000Mbps
		Lit Green for UTP link at 1000Mbps
		Blinking for UTP data activity

Application Scenario
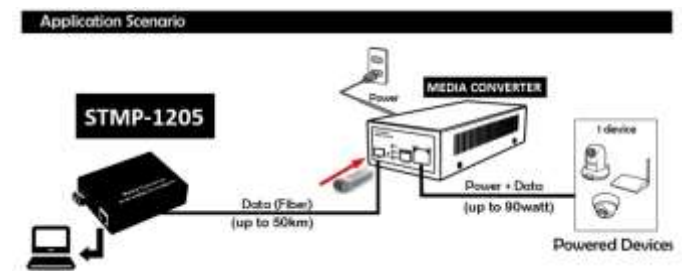
Product Specification

Standard	IEEE 802.3 10Base-T
	IEEE802.3u 100Base-TX/100Base-FX
	IEEE 802.3ab 1000Base-T
	IEEE 802.3z 1000Base-FX
	IEEE 802.3x flow control in full-duplex
RJ45 DATA Port	10/100/1000Mbps, auto MDI/MDIX
SFP Fiber Port	100/1000Mbps (Select by DS#1)
Power Input	5VDC~18VDC
Power Consumption	2.0 watts
LED Indicators	PWR, SFP, LFP, Data
Dimension (W x D x H)	73x75x28mm
Power Connector	DC Jack for 5VDC~18VDC
Certification	FCC/CE
Operating Environment	Operating temperature: -40 ~ +75°C
	Storage temperature: -40 ~ +75°C
	Humidity: 10 ~ 95% non-condensing

Note: *The device is a power-required device, meaning it won't work till it is powered.   If your networks should be active all the time, please consider using UPS (Uninterrupted Power Supply) for your device. It will prevent you from network data loss or network downtime.*