RP-MC301 series

10/100Base-TX to 100Base-FX
Smart Media Converter

RP-MC301series Fast Ethernet Media Converter support conversion between 10/100Base-T and 100Base-FX network. There are SC/ST/WDM connectors with single-mode or multi-mode media for various fiber optic applications, providing a cost-effective Ethernet-fiber link, in order to extend an Ethernet network connection over a fiber backbone. Just a simple plug-and-play that can be easily installed into any scenario.

RP-MC301 Series support DIP-Switch for enhancing smart function configuration. The DIP switch can disable or enable the LFP (link fault pass through) function , LFP function can immediately trigger the LED caution light which attract the network administrators' attention the problem of the link media and provide efficient solution to monitor the network, which can minimize the loss caused by the link problem.

The RP-MC301 series can be used as a standalone unit when powered by its DC adapter or installation into the 14 Slot , 2U rack mount media converter chassis (RP-MCR314) for use at a central wiring closet.

Features

- 10/100Mbps auto-sensed at the TP port
- Built-in efficient switching core to implement flow control and reduce broadcast packets
- Full-duplex and half-duplex auto-sensed or DIP-Switch setting
- Supporting auto-sense of MDI/MDI-X, facilitating system commissioning and installation
- DIP-Switch supporting setting half /full-duplex of FX.
- DIP-Switch supporting 10/100Mbps store-and-forward and 100Mbps cut-through transmission.
- DIP-Switch supporting LFP(Link Fault Pass-through) function
- Supporting the transmission of 100Base-FX, compatible with other devices
- Supporting low-time lag transmission
- Supporting the transmission of extra-long packets up to1600 bytes
- Extremely low power consumption (less than 2W), reliable and stable performance

Specifications

Standards	• IEEE802.3 10Base-T Ethernet, IEEE802.3u 100Base-TX/FX Fast Ethernet • IEEE802.3x Flow Control
Wavelength	• 850nm/1310nm/1550nm
Transmission distance	• Multi-mode Dual-fiber: 2 km(50/125μm or 62.5/125μm); • Single mode Dual-fiber: 20/40 km(9/125μm); • Single mode Single-fiber: 20/40 km(9/125μm); • Category-5 twisted pairs: 100m
Interface	• One RJ45 port: Connecting STP/UTP category-5 twisted pairs, EIA568A/B • One optical port: Multi-mode Dual-fiber: SC or ST (50/125μm or 62.5/125μm) Single mode Dual-fiber: SC (9/125μm)

Dip Switch	DIP-Switch	Off(Default)	On
	PIN-1	LFP function DISABLED	LFP function ENABLED
	PIN-2	Store and forward conversion mode	Cut-Though conversion mode
	PIN-3	Auto-Negotiation mode for TP port	Force operation mode for TP port
	PIN-4	TP port operate in 100Mbps	TP port operate in 10Mbps
	PIN-5	TP port operate in Full duplex mode	TP port operate in Half duplex mode
	PIN-6	Fiber port operate in Full duplex mode	Fiber port operate in Half duplex mode

Note: When setting the TP operation mode (PIN-4 or/and PIN-5), The TP port must be operate in Force mode (PIN-3 ON)

Conversion means	• Store and Forward mode(default) or Cut-Through mode(DIP-Switch)
Buffer space	• Built in 128Kb RAM for data buffer
Flow control	• Full duplex: flow control; • Half duplex: back pressure
LED indicators	• PWR (power supply), FX LINK/ACT (optical link action) • FDX (full duplex), TX LINK/ACT (TP cable link/action) • TX 100 (TP cable rate 100M), FX100(fiber cable rate 100M)
Power Consumption	• 2W
Power Supply	• External power adapter DC5V1A
Operating Temperature	• -10~55°C
Operating Humidity	• 5% to 90% (Non-condensing)
Storage Temperature	• -40~75º C
Dimension	• 71×94 ×26 mm (W*D*H)
Certification	• FCC, CE

Ordering information

RP-MC301SC   10/100Base-TX to 100Base-FX Smart Media Converter, MM/SC-2km

RP-MC301C20   10/100Base-TX to 100Base-FX Smart Media Converter, SM/SC-20km

RP-MC301C40   10/100Base-TX to 100Base-FX Smart Media Converter, SM/SC-40km

RP-MC301A20   10/100Base-TX to 100Base-FX Smart WDM Media Converter, SM/SC-20km, 1310nm

RP-MC301B20   10/100Base-TX to 100Base-FX Smart WDM Media Converter, SM/SC-20km, 1550nm