ZyXEL

10/100TX to 100FX Media Converter

Benefits

Extending the Network Span

The MC100FX-SC Series equips with one 100FX fiber port and one 10/100TX copper port for speed and media conversion. Featuring with SC type connector, the 100FX fiber port can extend network span for up to 30 km.

- **MC100FX-SC30-A**

  The built-in SC type connector and single-mode fiber transceiver module are capable of extending network span for up to 30 km.

- **MC100FX-SC2-A**

  The built-in SC type connector and multi-mode fiber transceiver module built-in are capable of extending network for span up to 2 km.

Transparent to 802.1Q VLAN Packets

The MC100FX-SC Series media converter can identify and retain 802.1Q VLAN packets to ensure that Virtual LANs (VLANs) operation across the media converter.

Easy Installation

With Auto-negotiation, the 10/100TX copper port can synchronize transmission speed and mode with peer devices. In addition, Auto-crossover on 10/100TX copper port eliminates circuit mismatch problem by auto-sensing the MDI/MDIX function; both features make installation easier to complete. Meanwhile, multiple configurations can be done via DIP switches to give users more management capability for better control over the devices.

Easy Troubleshooting

With the Link Fault Signaling (LFS) mechanism, one failed link detected on the 10/100 copper port will force to stop a link on the fiber port, and vice versa. The copper downlink port will stop transmitting and turned off as soon as the remote link is failed, and the Spanning Tree Protocol (STP) of the connected switch will start functioning as a result to activate the backup link that secure the network operation. Transparent link status is delivered by LFS mechanism to make network recovery and troubleshooting easier and faster.

- Converts Speed and Media Types
- Extends Network Span for up to 2 km/30 km
- Easy Installation
- Transparent to 802.1Q VLAN Packets
- Link Fault Signaling (LFS) Notifies Down Link to Peers
- Multiple Configurations via DIP Switch Setting

Media Converter

MC100FX-SC SERIES

Specifications

Standard Compliance

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX/FX
- IEEE 802.3x Flow Control and Back pressure

Transparent Packet

- 64 to 1518 Bytes for Non-VLAN Ethernet packet
- 68 to 1522 Bytes for VLAN-Tag type Ethernet packet

Link Fault Signaling (LFS)

- TX to Fiber: If TX port link down, then converter will forced fiber to link down.
- Fiber to TX: If Fiber port link down, the media converter will forced TX port to link down.

Hardware Specifications

- Support auto-negotiation on 10/100TX copper port
- Support auto MDI/MDI-X on 10/100TX copper port
- DIP Switch
  - DIP 1: Enables/disables auto-negotiation
  - DIP 2: Copper port (RJ45) duplex mode; full-duplex or half-duplex
  - DIP 3: Copper port (RJ45) data bit rate; 10 Mbps or 100 Mbps
  - DIP 4: Fiber port duplex mode; full-duplex or half-duplex
  - DIP 5: Enables/disables link fault signaling (LFS)
  - DIP 6: Enables/disables local loop back (LLBK)
  - DIP 7: Enables/disables remote loop back (RLBK)

MC100FX-SC2-A

- One 10/100BASE-T port and one 100BASE-FX Fiber Port (SC) with multi-mode fiber transceiver module built-in
- Enabling Maximum transmission distance: 2 km
- Wavelength of 100FX fiber: 1310 nm

MC100FX-SC30-A

- One 10/100BASE-T port and one 100BASE-FX Fiber Port (SC) with single-mode fiber transceiver module built-in
- Enabling Maximum transmission distance: 30 km
- Wavelength of 100FX fiber: 1310 nm

Physical Specifications

- Dimensions: 73.8 (W) x 109.2 (D) x 23.4 (H) mm
- Weight: 160 g

MC100FX-SC2-A

MC100FX-SC30-A

Power Requirement

- External power adapter; 12 VDC/0.8 A
- Max power rating: 2.4 Watt

Environmental Specifications

- Operating temperature: 0°C ~ 45°C
- Storage temperature: -20°C ~ 80°C
- Operating humidity: 10% ~ 90%, non-condensing

Certification

- Safety: CE LVD
- EMC: FCC Part15 (Class A), CE EMC (Class A)

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