MCT-100 Series

1 x 10/100Base-TX RJ-45 to

1 x 100Base-FX BTFC/W2X/SFP

Standalone Media Converter

Description

Connection Technology Systems (CTS) MCT-100 series media converter are the Fast Ethernet 10/100Base-TX to 100Base-FX media converter. The MCT-100 series media converter converts traditional twisted-pair RJ-45 cable into various fiber media including multi-mode, single-mode, SC/ST connector, bi-directional WDM, or a SFP slot for pluggable fiber transceiver, extending transmission distance for the deployment to the household, apartment or campus.

MCT-100 series media converter is fully compliant with IEEE 802.3, 802.3u standards. Besides, it is equipped with some switching features including store and forward.

The installation and operation are simple and straightforward. The operation status can be monitored through a set of diagnostic LED indicators on the front panel. It is especially designed for network operators, metro Ethernet providers, enterprises, SMB, who have the need of implementing fiber optical Ethernet networks over long distance, for FTTX solutions, and are looking for an effortless and reliable 100Mbps media converter.

Key Features

- **The World-wide Effortless and Reliable Media Converter**

The almost "set-it-and-forget-it" media converter is for minimizing network implementation and maintenance efforts.

- **9K Bytes Jumbo Frame Size**

Support jumbo frame size 9K bytes to ease the network traffic loading and facilitate IPTV service.

- **Fully Compatible with MCT-RACK-12 and MCT-RACK-18 Series**

Space-saving and budget limited solution for MCT-RACK-12 and MCT-RACK-18 series to mix installation with MCT series converter.

- **Link Alarm**

When UTP or Fiber Port is Down during Operation, the other Port will be automatically turned off to alert the User.

- **Targeted Applications**

- FTTX implementations. Point-to-point fiber connection for long distance.

Specification

■ Interface

RJ-45 Port

- 1 x 10/100Base-TX RJ-45

Fiber Port

- 1 x 100Base-FX

Standards

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3u 100Base-FX

■ H/W Specification

- MAC Address Table: 2K
- Non-blocking Switching Fabric: 400Mbps
- Throughput @ 64Bytes: 0.29Mpps
- Jumbo Frame: 9K Bytes
- Packet Buffer: 128K Bytes
- Store and Forward Switching Mechanism
- Auto-Cross over for MDI/MDI-X in TP port
- Auto-Negotiation in TP Port
- Full/Half Duplex Mode Operation

■ Forward/Filter Rate

- 10M: 14,880/14880pps
- 100M: 148,800/148,800pps

■ LED

Power, Status, FDX, TP, F/O, Speed

■ DIP Switch

- TP Auto-Negotiation Enable/Disable
- TP Speed 10/100Mbps
- TP Duplex Full/Half
- Link Alarm Enable/Disable

■ Installation Method

- Wall-mount (optional)
- DIN-rail (optional)
- Magnetic-mount kit (optional)

■ Power Requirement

- Power Input (Main body): 5 VDC
- Power Adaptor (Including in package)
  Input : 100~240 VAC, 50~60 Hz
  Output : 5 VDC
- Max. Power Consumption: 3W (10.23 BTU/h)

■ Environmental Condition

- Operation: 0˚C~50˚C
- Storage: -20˚C~60˚C
- Humidity: 5%~90% RH, Non-Condensing

■ Dimension & Weight

- Size: 51 x 74 x 20mm (W x D x H)
- Weight: 0.1kg
- Housing: Iron

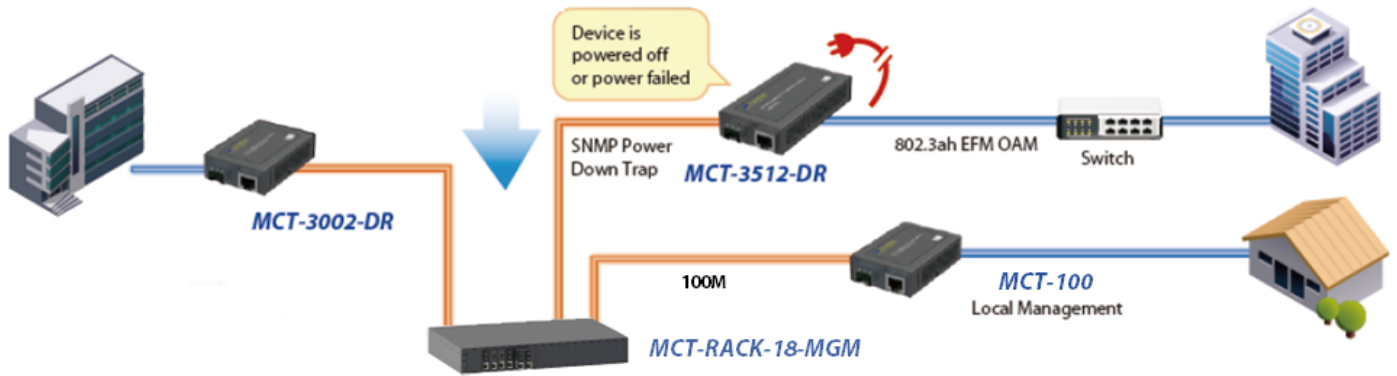## ■ Standards and Certifications

CE/FCC Class A

- Safety: IEC 62368-1
- EMC: EN 55032 / EN 55035
- ESD
  Air Discharge: +/-8kV
  Contact Discharge: +/-4kV
- EFT
  AC input: +/-1kV
  Signal (RJ-45): +/-0.5kV
- Surge Protection
  AC input: +/-1kV
  Signal (RJ-45): +/-1kV

UKCA/RCM

RoHS 2.0

Application Diagram

Order Information

Model	Fiber Port						TP Port	
	Speed (Mbps)	Type	Connector	Distance	Wavelength	Port	Speed (Mbps)	Port
MCT-100BTFC	100	MM	SC	2KM	1310nm	1	10/100	1
MCT-100BTFT	100	MM	ST	2KM	1310nm	1	10/100	1
MCT-100BTFC(SM-30)	100	SM	SC	30KM	1310nm	1	10/100	1
MCT-100W2A(SM-20/40)	100	WDM	SC	20/40KM	TX: 1310nm RX: 1550nm	1	10/100	1
MCT-100W2B(SM-20/40)	100	WDM	SC	20/40KM	TX: 1550nm RX: 1310nm	1	10/100	1
MCT-100SFP	100	SFP	-	-	-	1	10/100	1

Accessory

SFP-31

Model	Specification					
	Speed	Type	Connector	Distance	Wavelength	Operating Temperature
SFP-31FC-DR	100/1000Mbps	MM	LC	550M/2KM	1310nm	0˚C~70˚C
SFP-31FC(SM-10)-DR	100/1000Mbps	SM	LC	10KM	1310nm	0˚C~70˚C
SFP-31W2A(SM-10/20)-DR	100/1000Mbps	WDM	LC	10/20KM	TX: 1310/1310nm / RX: 1550/1550nm	0˚C~70˚C
SFP-31W2B(SM-10/20)-DR	100/1000Mbps	WDM	LC	10/20KM	TX: 1550/1550nm / RX: 1310/1310nm	0˚C~70˚C