

MCT-5002SFP+ Media Converter



10G N-Base-T (100M/1G/2.5G/5G/10G) to 10GBase-R
Compact Media Converter

Features

- **Comply with IEEE 802.3ae 10GBase-R**
The SFP+ port supports multi-mode, single-mode, including CWDM/DWDM, or Direct Attached Cable (DAC).
- **Comply with IEEE 802.3bz N-Base-T (Multi-Gigabit)**
The RJ-45 port supports 100M/1G/2.5G/5G/10G 5 speeds and maximum distance is up to 100 meters.
- **Jumbo frame & Transparent mode**
Maximum MTU size up to 9Kbytes also transparent to VLAN tagged packets.
- **Loopback mode**
Support loopback on 10G SFP+ interface, all frames received on loopback mode will be transmitted back.
- **Link Alarm**
Either Fiber or RJ-45 when port link down is detected during operation, the other port will be automatically turned off to alert user.
- **Fully Compatible with MCT-RACK Chassis Series**
Space-saving and budget-limited solution for MCT-RACK chassis series to mix the installation of MCT series converters.
- **In Rack Management**
Support CTS MCT-RACK management, it allows administrator to configure and monitor the slide-in media converters such as port speed, shutdown and SFP DDMI information.

Description

Connection Technology Systems (CTS) MCT-5002SFP+ media converter is a 10G N-Base-T (100M/1G/2.5G/5G/10G) to 10GBase-R media converter. The MCT-5002SFP+ media converter converts traditional twisted-pair RJ-45 cable into SFP+ slot for pluggable fiber transceiver, extending transmission distance for Data Center 10G N-Base-T to 10GBase-R conversion application or ISP Mobile DU and Enterprise broadband service applications.

MCT-5002SFP+ media converter is fully compliant with IEEE 802.3u, 802.3ab, 802.3bz and 802.3ae & 802.3an standards. 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. In addition, MCT-5002SFP+ can be monitored and slightly managed when it is inserted into a slot of the MCT-RACK-MGM chassis series. It is especially designed for network operators and metro Ethernet providers who have the need of implementing fiber optical Ethernet networks over long distance, for FTTX solutions, and are looking for an effortless and reliable 10G fiber Ethernet media converter.

Target Applications

- **Data center 10GBase-T to 10GBase-R conversion application and ISP for Enterprise customer 10G network converter.**

Specification

■ Interface

- F/O Port (Type):
1 x 10Gbps (SFP+)
- TP Port (Type):
1 x 100M/1G/2.5G/5G/10Gbps (RJ-45)

■ Standards

- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3bz 2.5G/5GBase-T
- IEEE 802.3ae 10GBase-R
- IEEE 802.3an 10GBase-T

■ H/W Specification

- Jumbo frame : 9K Bytes
- Auto-Cross Over for MDI/MDIX in TP Ports
- Auto-Negotiation in TP Ports
- Full/Half Duplex Mode Operation

■ LED

- Power, TP Speed Link/Act, F/O Link/Act, Status, Duplex

■ Forward/Filter Rate

- 100M: 148,800/148,800pps
- 1G: 1,488,000/1,488,000pps
- 2.5G: 3,720,000/3,720,000pps
- 5G: 7,440,000/7,440,000pps
- 10G: 14,880,000/14,880,000pps

■ Ethernet Feature

- DIP Switch
- Link Alarm/Loopback/TP Port Speed/
Software Control/Fiber Auto Negotiation

■ In-Rack Management

- Module Monitor:
Model Name
Serial Number
Port Link Status
SFP+ DMI Information
- Module Configuration:
Description
Port Shutdown
Power Shutdown
TP Port Speed (Fixed/Auto)

■ Power Requirement

- AC to DC Power Adaptor
- Input: 100 ~ 240VAC, 50/60Hz
- Input: 12V DC
- Power Consumption: 8W

■ Environmental Condition

- Operation: 0°C ~ 50°C
- Storage Temperature: -20°C ~ 60°C
- Humidity: 5%~90%, Non-condensing

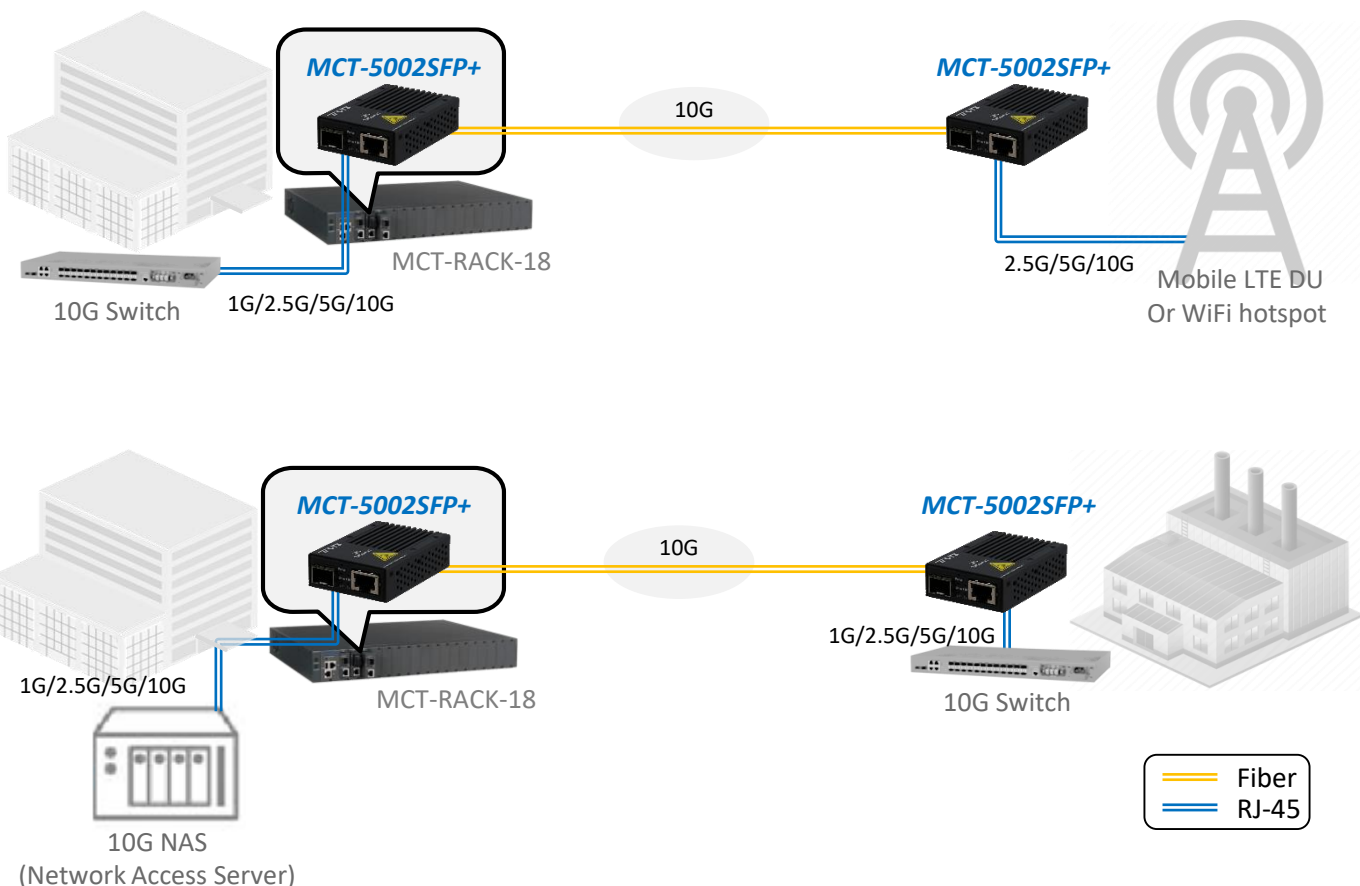
■ Dimension & Weight

- Size: 51 x 74 x 20 mm (W x D x H)
- Weight: 0.13Kg

■ EMC/Safety

- FCC Class A, CE

Application Diagram



Order Information

MCT-5002SFP+

| Model | Fiber Ports | | | | | TP Ports | | Support Power Source |
|--------------|-------------|------|-----------|-----------|-------|------------------------|-------|---------------------------------|
| | Speed | Type | Connector | Distance | Ports | Speed | Ports | |
| MCT-5002SFP+ | 10Gbps | SFP+ | - | 300M/80KM | 1 | 100M/1G/2.5G/5G/10Gbps | 1 | External AC to DC Power Adapter |

SFP-51 Series

| Model | Fiber Ports | | | | |
|------------------|-------------|------|-----------|----------|------------|
| | Speed | Type | Connector | Distance | Wavelength |
| SFP-51FC | 10G | MM | LC | 300M | 850nm |
| SFP-51FC(SM-10) | 10G | SM | LC | 10KM | 1310nm |
| SFP-51FC(SM-40) | 10G | SM | LC | 40KM | 1550nm |
| SFP-51FC(SM-80) | 10G | SM | LC | 80KM | 1550nm |
| SFP-51W2A(SM-10) | 10G | WDM | LC | 10KM | TX: 1270nm |
| | | | | | RX: 1330nm |
| SFP-51W2B(SM-10) | 10G | WDM | LC | 10KM | TX: 1270nm |
| | | | | | RX: 1330nm |
| SFP-51W2A(SM-20) | 10G | WDM | LC | 20KM | TX: 1270nm |
| | | | | | RX: 1330nm |
| SFP-51W2B(SM-20) | 10G | WDM | LC | 20KM | TX: 1270nm |
| | | | | | RX: 1330nm |
| SFP-51W2A(SM-40) | 10G | WDM | LC | 40KM | TX: 1270nm |
| | | | | | RX: 1330nm |
| SFP-51W2B(SM-40) | 10G | WDM | LC | 40KM | TX: 1270nm |
| | | | | | RX: 1330nm |