**Innovation to Your Needs** 

# **MCT-3612-DR Series Media Converter**



Link

alarm

10/100/1000BASE-T to 100/1000BASE-X Compact Managed Media Converter

#### **Features**

9K Bytes Jumbo Frame Size
 Support Jumbo Frame size 9K bytes to ease the network traffic loading and facilitate IPTV services.

rate

- Local Management for Port Status and Configuration
   Both Local Module Control (Auto, Speed and Duplex) and Local Module Monitor (Link, Speed and Duplex) are available.
- Fully Compatible with MCT-RACK-18 Series
   Budget limited solution for MCT-RACK-18 series to mix installation with CTS's non-management media converter.
- Link Alarm
   When UTP or fiber port is down during operation, the other port will be automatically turned off to alert the user.
- Dual Rate with Auto-Sensing Function
   Dual rate fiber transceiver with Auto-Sensing function can automatically adjust the transmission speed to save the cost when upgrading the device from 100Mbps to 1000Mbps.

#### **Target Application**

 Managed media converter which required monitoring point-to-point connection for the deployment of FTTX applications

#### **Description**

Connection Technology Systems (CTS) MCT-3612-DR series media converter are the Gigabit Ethernet 10/100/1000Base-T to 100/1000Base-X media converter. MCT-3612-DR series media converter allows user to connect Ethernet twisted-pair RJ-45 cable into various fiber media including Multi-mode, Single-mode, Bi-directional WDM, or a SFP slot for pluggable fiber transceiver, extending transmission distance for the deployment to the household, apartment or campus.

MCT-3612-DR series media converter is fully compliant with IEEE 802.3, 802.3u, 802.3ab & 802.3z standards. Besides, it is equipped with some switching features including flow control and store and forward mechanism.

The installation and operation are quite 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 1000Mbps media converter.

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#### **Application Diagram**



## **Specification**

#### Interface

- F/O Port (Type):
- 1 x 100/1000Mbps (BTFC/W2X/SFP)
- -TP Port (Type):
- 1 x 10/100/1000Mbps (RJ-45)

#### Standard

IEEE802.3 10Base-T IEEE802.3u 100Base-TX/FX IEEE802.3ab 1000Base-T IEEE802.3z 1000Base-X

#### LED

Power/Status, TX Link/Act, Speed, FDX, F/O Link/Act

#### **H/W Specification**

MAC Address Table: 2K Memory Buffer: 128K Bytes Jumbo Frame: 9K Bytes Auto-Negotiation in TP Ports Full/Half Duplex Mode Operation

#### Forward/Filter Rate

10M: 14,880/14,880pps 100M: 148,800/148,800pps 1000M: 1,488,000/1,488,000pps

#### **Ethernet Feature**

- Standalone Configure by DIP
- Store and Forward Switching Mechanism
- Auto-Cross Over for MDI/MDIX in TP Ports
- Bandwidth Control
- Storm Control
- VLAN Transparency
- BPDU Transparency

#### **In-Rack Management**

- Module Reset/Power-Down
- IEEE 802.1Q tag VLAN, Q-in-Q
- Module Firmware Upgrade
- Module Configuration:
- Half/Full Duplex
- Fiber Speed Auto Sensing
- Port Speed
- Port Rate-Limit
- · Link Alarm
- Module Monitor:
- Port Status
- Port Traffic Counter
- SFP/DMI Information

#### **Power Requirement**

AC to DC Power Adaptor

- Input: 100~240VAC, 50/60Hz
- Output: 3.3VDC
- Power Consumption: 2.1W(Max.)

#### **Environmental Condition**

Operation:  $0^{\circ}\text{C} \sim 50^{\circ}\text{C}$ Storage Temperature:  $-20^{\circ}\text{C} \sim 60^{\circ}\text{C}$ Humidity:  $5\% \sim 90\%$  Non-Condensing

#### **Dimension & Weight**

Size: 51 x 74 x 20 mm Weight: 0.1Kg

#### **EMC/Safety**

FCC Class A, CE



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### **Order Information**

#### MCT-3612 / MCT-3612-DR

| MODEL                                | FIBER PORT   |      |           |                      |  |      |              | TP PORT |  |
|--------------------------------------|--------------|------|-----------|----------------------|--|------|--------------|---------|--|
|                                      | Speed (Mbps) | Type | Connector | Distance             | Wavelength   | Port | Speed (Mbps) | Port    |  |
| MCT-3612BTFC*                        | 1000         | MM   | SC        | 550M                 | 850nm  | 1    | 10/100/1000  | 1       |  |
| MCT-3612BTFC<br>(SM-10/20/30/50/80)* | 1000         | SM   | SC        | 10/20/30/50/<br>80KM | 1310nm/1310nm/1310nm/1550nm/<br>1550nm               | 1    | 10/100/1000  | 1       |  |
| MCT-3612W2A(SM-10/20/40)*            | 1000         | WDM  | SC        | 10/20/40KM           | TX:1310nm/1310nm/1310nm<br>RX:1550nm/1550nm/1550nm   | 1    | 10/100/1000  | 1       |  |
| MCT-3612W2B(SM-10/20/40)*            | 1000         | WDM  | SC        | 10/20/40KM           | TX: 1550nm/1550nm/1550nm<br>RX: 1310nm/1310nm/1310nm | 1    | 10/100/1000  | 1       |  |
| MCT-3612BTFC(SM-10)-DR               | 100/1000     | SM   | SC        | 10KM                 | 1310nm   | 1    | 10/100/1000  | 1       |  |
| MCT-3612W2A(SM-10)-DR                | 100/1000     | WDM  | SC        | 10KM                 | TX: 1310nm<br>RX: 1550nm                             | 1    | 10/100/1000  | 1       |  |
| MCT-3612W2B(SM-10)-DR                | 100/1000     | WDM  | SC        | 10KM                 | TX: 1550nm<br>RX: 1310nm                             | 1    | 10/100/1000  | 1       |  |
| MCT-3612SFP-DR                       | 100/1000     | SFP  | -         | -                    | -  | 1    | 10/100/1000  | 1       |  |

<sup>\*</sup>Coming Soon

#### SFP-31

| MODEL                               | FIBER PORT   |      |           |                          |   |             |  |  |
|-------------------------------------|--------------|------|-----------|--------------------------|---|-------------|--|--|
| MODEL                               | Speed (Mbps) | Type | Connector | Distance                 | Wavelength                                    | Temperature |  |  |
| SFP-31FC                            | 1000         | MM   | LC        | 550M                     | 850nm   | 0°C to 70°C |  |  |
| SFP-31FC(SM-<br>10/20/40/50/80/120) | 1000         | SM   | LC        | 10/20/40/50/80<br>/120KM | 1310nm/1310nm/1310nm/1550nm/1550nm<br>/1550nm | 0°C to 70°C |  |  |
| SFP-31W2A(SM-10/20/40/80)           | 1000         | WDM  | LC        | 10/20/40/80KM            | TX:1310nm/1310nm/1310nm/1510nm                | 0°C to 70°C |  |  |
|                                     |              |      |           |                          | RX:1550nm/1550nm/1550nm/1570nm                |             |  |  |
| SFP-31W2B(SM-10/20/40/80)           | 1000         | WDM  | LC        | 10/20/40/80KM            | TX:1550nm/1550nm/1550nm/1570nm                | 0°C to 70°C |  |  |
|                                     |              |      |           |                          | RX:1310nm/1310nm/1310nm/1510nm                |             |  |  |
| SFP-31FC-C11                        | 1000         | CWDM | LC        | 80KM                     | 1470nm  | 0°C to 70°C |  |  |
| SFP-31FC-C12                        | 1000         | CWDM | LC        | 80KM                     | 1490nm  | 0°C to 70°C |  |  |
| SFP-31FC-C13                        | 1000         | CWDM | LC        | 80KM                     | 1510nm  | 0°C to 70°C |  |  |
| SFP-31FC-C14                        | 1000         | CWDM | LC        | 80KM                     | 1530nm  | 0°C to 70°C |  |  |
| SFP-31FC-C15                        | 1000         | CWDM | LC        | 80KM                     | 1550nm  | 0°C to 70°C |  |  |
| SFP-31FC-C16                        | 1000         | CWDM | LC        | 80KM                     | 1570nm  | 0°C to 70°C |  |  |
| SFP-31FC-C17                        | 1000         | CWDM | LC        | 80KM                     | 1590nm  | 0°C to 70°C |  |  |
| SFP-31FC-C18                        | 1000         | CWDM | LC        | 80KM                     | 1610nm  | 0°C to 70°C |  |  |

#### SFP-31-DR

| MODEL               | FIBER PORT   |        |           |          |            |               |  |  |
|---------------------|--------------|--------|-----------|----------|------------|---------------|--|--|
|                     | Speed (Mbps) | Type   | Connector | Distance | Wavelength | Temperature   |  |  |
| SFP-31FC-DR         | 100/1000     | MM     | LC        | 2KM/550M | 1310nm     | 0°C to 70°C   |  |  |
| SFP-31FC(SM-10)-DR  | 100/1000     | SM     | LC        | 10KM     | 1310nm     | 0°C to 70°C   |  |  |
| SFP-31W2A(SM-10)-DR | 100/1000     | WDM    | LC        | 10KM     | TX:1310nm  | 0°C to 70°C   |  |  |
|                     |              |        |           |          | RX:1550nm  |               |  |  |
| SFP-31W2B(SM-10)-DR | 100/1000 WDI | MDM    | LC        | 10KM     | TX:1550nm  | - 0°C to 70°C |  |  |
|                     |              | VVDIVI |           |          | RX:1310nm  |               |  |  |