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

- **Link Alarm**
  When UTP or fiber port is down during operation, the other port will be automatically turned off to alert the user

- **Fully Compatible with MCT-RACK-18 Series**
  Space-saving and budget limited solution for MCT-RACK-18 series to mix installation with MCT series converter

- **Dual Rate**
  Dual Rate media converter with auto-sensing function can automatically adjust to the speed of the slide-in fiber transceiver. This can save the cost when upgrading the device from 100Mbps to 1000Mbps

Target Applications

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

Description

Connection Technology Systems (CTS) MCT-3002-DR series media converter are the Gigabit Ethernet 10/100/1000 Base-T to 100/1000Base-X media converter. The MCT-3002-DR series media converter converts traditional twisted-pair RJ-45 cable into various fiber media including multi-mode, single-mode, SC 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-3002-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 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 1000Mbps media converter.
Application Diagram

Specication

**Interface**
- **TP Port**: 10/100/1000Base-T RJ-45 x 1
- **F/O Port**: 100/1000Base-X x 1

**Standards**
- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX/FX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X

**H/W Specication**
- Store and Forward Switching Mechanism
- Auto-Crossover for MDI/MDI-X in TP Port
- Auto-Negotiation in TP Port
- Full/Half Duplex Mode Operation
- Mac Address Table: 2K
- Memory Buffer (Bytes): 128K
- Jumbo Frame (9K Bytes)
- Slide-In Converter Center

**LED**
- Power, FDX, Status, Speed, F/O, TP

**Ethernet Features**
- Support 9K Bytes Jumbo Frame
- Store and Forward Switching Mechanism

**Other Features**
- Rear Panel DIP Switch
- Support Link Alarm
- Support Slide-In Converter Center

**Power Requiremrnt**
- **Power Adaptor**
  - AC Input: 100VAC~240VAC
  - Frequency Range: 50~60Hz
  - DC Output: 3.3V
  - Power Consumption: 2.3W

**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 (WxDxH)
- **Weight**: 0.1Kg

**EMC/Safety**
- FCC Class A, CE
## Order Information

### MCT-3002-DR

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Speed</th>
<th>Fiber Type</th>
<th>Connector</th>
<th>Distance</th>
<th>Ports</th>
<th>Speed</th>
<th>Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCT-3002W2A(SM-10)-DR</td>
<td>100/1000Mbps</td>
<td>WDM</td>
<td>SC</td>
<td>10KM</td>
<td>1</td>
<td>10/100/1000Mbps</td>
<td>1</td>
</tr>
<tr>
<td>MCT-3002W2B(SM-10)-DR</td>
<td>100/1000Mbps</td>
<td>WDM</td>
<td>SC</td>
<td>10KM</td>
<td>1</td>
<td>10/100/1000Mbps</td>
<td>1</td>
</tr>
<tr>
<td>MCT-3002SFP-DR</td>
<td>100/1000Mbps</td>
<td>SFP</td>
<td></td>
<td></td>
<td></td>
<td>10/100/1000Mbps</td>
<td>1</td>
</tr>
</tbody>
</table>

### SFP-31-DR

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Speed</th>
<th>Type</th>
<th>Connector</th>
<th>Distance</th>
<th>Wavelength</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFP-31FC-DR</td>
<td>100Mbps/1000Mbps</td>
<td>MM</td>
<td>LC</td>
<td>2KM/550M</td>
<td>1310nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31FC(SM-10)-DR</td>
<td>100Mbps/1000Mbps</td>
<td>SM</td>
<td>LC</td>
<td>10KM</td>
<td>1310nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31W2A(SM-10)-DR</td>
<td>100Mbps/1000Mbps</td>
<td>WDM</td>
<td>LC</td>
<td>10KM</td>
<td>TX:1310nm RX:1550nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31W2B(SM-10/20/40/80)-DR</td>
<td>100Mbps/1000Mbps</td>
<td>WDM</td>
<td>LC</td>
<td>10/20/40/80KM</td>
<td>TX:1310nm RX:1550nm</td>
<td>0°C to 70°C</td>
</tr>
</tbody>
</table>

### SFP-30

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Speed</th>
<th>Type</th>
<th>Connector</th>
<th>Distance</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFP-30TP</td>
<td>1000Mbps</td>
<td>-</td>
<td>RJ-45</td>
<td>100M</td>
<td>0°C to 70°C</td>
</tr>
</tbody>
</table>

### SFP-31

<table>
<thead>
<tr>
<th>MODEL</th>
<th>Speed</th>
<th>Type</th>
<th>Connector</th>
<th>Distance</th>
<th>Wavelength</th>
<th>Temperature</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFP-31FC</td>
<td>1000Mbps</td>
<td>MM</td>
<td>LC</td>
<td>550M</td>
<td>850nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31FC(SM-10/20/40/50/80 /100/120)</td>
<td>1000Mbps</td>
<td>SM</td>
<td>LC</td>
<td>10/20/40/50/80/100/120KM</td>
<td>1310nm/1310nm/1310nm/1550nm/1550nm/1550nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31W2A(SM-10/20/40/80)</td>
<td>1000Mbps</td>
<td>WDM</td>
<td>LC</td>
<td>10/20/40/80KM</td>
<td>TX:1310nm RX:1310nm RX:1570nm</td>
<td>0°C to 70°C</td>
</tr>
<tr>
<td>SFP-31W2B(SM-10/20/40/80)</td>
<td>1000Mbps</td>
<td>WDM</td>
<td>LC</td>
<td>10/20/40/80KM</td>
<td>TX:1310nm RX:1310nm RX:1310nm</td>
<td>0°C to 70°C</td>
</tr>
</tbody>
</table>