# 10G In-Band Managed Media Converter

## 5 FRM220-10GCM

**CTC** union

### 100M/1G/10GBase-T + 2 × 10GBase-R SFP+ In-Band Managed Media Converter

**NEW**

10G In-band managed media converter, FRM220-10GCM is a 2-port 10GBase-R + 1-port 100M/1G/2.5G/10GBase-T Ethernet converter. With embedded SNMP and Web-based management, the network administrator can monitor, configure and control the activity of each 10G converter both locally and remotely. This media converter supports duplex and speed configuration, jumbo frames allocation of 10G Gigabit interfaces. By offering additional function, this 10G converter also provides 1-port 100M/1G/2.5G/10GBase-T RJ45 port allowing 100M/1G/2.5G/10G based devices to connect to 10G Ethernet fiber backbone. This 10G converter may also be controlled and monitored via an NMC in a FRM220 managed chassis.

## Features

- 2-port 1G/2.5G/5G/10G Base-R SFP+ with
  1-port 100M/1G/2.5G/5G/10GBase-T RJ45
- Supports local / remote In-band management
- Standalone IP Based, Web GUI, Telnet, SNMP management
- Auto-Negotiation / Auto MDI/MDIX
- Forward 10K bytes Jumbo packets (max.)
- Supports Flow control (Pause)
- Supports BERT / loopback test

- Supports Far End Fault Indication (FEFI)
- Supports Link Fault Pass-Through (LFPT)
- D/D function for supported SFP fiber transceiver
- Auto Laser Shutdown (ALS)
- Online local / remote f/w upgrade
- Fiber Redundant mode
- Supports DWDM Tunable SFP+

## Specifications

| | |
|---|---|
| Interface | 1-port 100M/1G/2.5/5G/10Gbps RJ45 + 2-port 10G/5G/2.5G/1Gbps SFP+ with USB console port |
| Filter & Forward Rate | 14880pps at 10Mbps, 148800pps at 100Mbps, 1488000pps at 1Gbps, 14880000pps at 10Gbps |
| Transmission Method | Store and Forward |
| Standard | IEEE 802.3 IEEE 802.3u, IEEE 802.3x, IEEE 802.3z, IEEE 802.3ab, IEEE 802.3ae, IEEE 802.1D IEEE 802.1w, IEEE 802.1s |
| Packet Buffer | 2M bits |
| MAC Table Size | 16K |
| Max. Packet Size | 10K Bytes |
| Management | Web/Telnet /SNMP, HTTP, IPv6/IPv4 management |
| SNMP Agent | SNMP v1/v2c |
| Software Upgrade | HTTP, console |
| LED Display | Power, System, Link, Speed/Act, Test |
| Power Input | 12VDC |
| Power Consumption | < 10W |
| Operating Temperature | 0 ~ 45°C |
| Storage Temperature | -10 ~ 70°C |
| Humidity | 5% ~ 90% (non-condensing) |
| Dimensions | 159.5 × 20.8 × 88mm (D×W×H) |
| Regulatory | FCC, CE |

## Ordering Information

| Model Name | Description |
|---|---|
| FRM220-10GCM | 1 × 100M/1G/2.5G/10G Base-T RJ45 + 2 × 10GBase-R SFP+ In-Band Managed Media Converter |

**NOTE:** This card MUST placed in "cooling fan" chassis. CH02M, CH02/NMC, CH02/SMT

**Attention:**
Please note that the maximum of 10 High Power Consumption cards can be inserted in CH20 chassis. They must be placed in the **EVEN** slots when inserted in CH20 chassis.
*High Power Consumption Cards: FRM220-100GE-2Q, 40G-2Q, 16G-3R, 10G-3R & 10GCM.

*www.ctcu.com / sales@ctcu.com / Specifications & design are subject to change without prior notice. Please visit CTC Union website for more details.*