In-band Managed Platform
FRM220

In-Band Management Meida Converters for Broadband and Data Networks

This document specifies the functional as well as operation & maintenance requirements of the In-band media converters for broadband and data network. A major application of media converters is to make use of optical fiber as the transmission media for extending the reach of the following interfaces between two locations. Media converters are deployed in pairs, typically between a two CO sides or bewteen a CO and CPE location or between two CPE location. The media converter should be transparent to Layer 2 and Layer 3 protocols including, IEEE 802.1q, VLAN tag, Spanning Tree Protocol, IPX, IP etc.
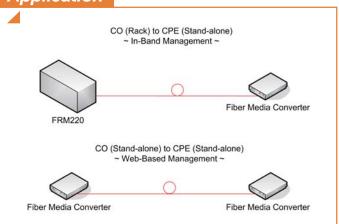
FRM220-210

Features

- Local/Remote Module Control - Auto/Speed/Duplex
- Full Wire Speed In-Band Diagnostic (Loop back Test)
- TFTP on-line f/w upgrade
- NTP Client
- Bandwidth Control Configuration (Egress/Ingress)
- Support Link Pass Through
- Configuration DIP Switch Support Auto/Speed/Duplex/Auto MDIX/MDIX
- Remote Management support Console/Telnet/SNMP V.1&V.2
- Supports Web Management
- OAM frame compatible with TS-1000 inband management
- CO/CPE Line cards swappable

Application

CO (Rack) to CPE (Stand-alone)
~ In-Band Management ~

FRM220

Fiber Media Converter

CO (Stand-alone) to CPE (Stand-alone)
~ Web-Based Management ~

Fiber Media Converter

Fiber Media Converter

Ordering Information

FRM220-CH20	2U, 19", In-band Managed Rack, host up to 20 slots
FRM220-AC	90 ~ 264 VAC power supply module, IEC connector
FRM220-DC24	18 ~ 36 VDC power supply module, 3 pin terminal block
FRM220-DC48	36 ~ 72 VDC power supply module, 3 pin terminal block
FRM220-NMC	Network Managed Card, support console RS-232 port and 10/100Base-T Ethernet port, w/Web, SNMP/MIB file
FRM220-110	Non-Managed, 10/100Base, Silde-In Card
FRM220-210	In-band Managed, 10/100Base, Silde-In Card

Specifications

Physical Unit Specification		
Compliance	CE, FCC	
Central Office Unit		
Power Supply	1+1 Redundancy mode, Hot-sw appable	
	DC	24~72VDC
	AC	100~240VAC (Frequency:50~60Hz)
Chassis	2U, 19", Rack-mount type	
Card Module	Hot-sw appable card type design	
LEDs	PWR, Link, ACT, SPD, Duplex	
Fan tray	Removable type for ease maintenance	
Remote Unit		
Power Supply	DC	24~72VDC
	AC	100~240VAC (Frequency:50~60Hz)
Temperature	0-60oC (operating) 0-70oC (storage)	
Humidity	5-95% with condensation	
LEDs	PWR, Link, ACT, SPD, Duplex	
Wall Mount	With wall mount clamp	
Interface Specifications		
Local Interface		
FE media converter - 10/100Base-TX to 100Base-FX		
Auto detect cross/straight cable		
Operating mode	Fixed, 10M/Half, 10M/Full, 100M/Half, 100M/Full	
Auto negotiation of 10/100Mbit/s and half/full deplex		
Selection of these operation modes must set by configurations		
MTU	2046 Bytes	
GbE media converter - 10/100/1000Base-TX to 1000Base-FX		
Auto detect cross/straight cable		
Operating mode	Fixed, 10M/Half, 10M/Full, 100M/Half, 100M/Full, 1000M/full	
Auto negotiation of 10/100Mbit/s and half/full deplex		
Selection of these operation modes must set by configurations		
MTU	2046 Bytes	
WAN Interface		
Wavelength	850nm, 1310nm, 1550nm,	
Optical connector	SC/PC	
Fiber type	9/125um single mode; 62.2/125um multi-mode	

Slide-in Line Card Modules

FRM220-10/100-ST 002	ST, 2Km, 1310nm, 11dB
FRM220-10/100-SC 002	SC, 2Km, 1310nm, 11dB
FRM220-10/100-ST 020	ST, 20Km, 1310nm, 12dB,
FRM220-10/100-SC 020	SC, 20Km, 1310nm, 12dB
FRM220-10/100-ST 040	ST, 40Km, 1310nm, 20dB
FRM220-10/100-SC 040	SC, 40Km, 1310nm, 20dB
FRM220-10/100-ST 060	ST, 60Km, 1310nm, 28dB
FRM220-10/100-SC 060	SC, 60Km, 1310nm, 28dB

CTC union

tel: +886 2659-1021 info@ctcu.com
fax: +886 2659-0237 support@ctcu.com
sales@ctcu.com www.ctcu.com