



FRM220-1000M FRM220-1000MS

Web Smart OAM Managed 10/100/1000Base-T to 100/1000Base-X GbE Media Converter

The FRM220-1000M(S) is an IEEE 802.3ah OAM compliant copper to fiber Gigabit Ethernet solution designed to make conversion between 10/100/1000Base-T and 100/1000Base-X with SFP modules (1000MS) and fixed type 1x9 SC connector (1000M). With SNMP and Web-based management in the FRM220, the administrator can monitor, configure and control the activity of each 802.3ah series card and remotely connected OAM compliant converter. Converter settings include bandwidth control, duplex, and speed configuration, VLAN tagging, limited Q-in-Q support and SFP DDMI. When used as stand-alone converters, the 1000M(S) can be managed by a friendly Web Smart user interface via any web browser.

Features

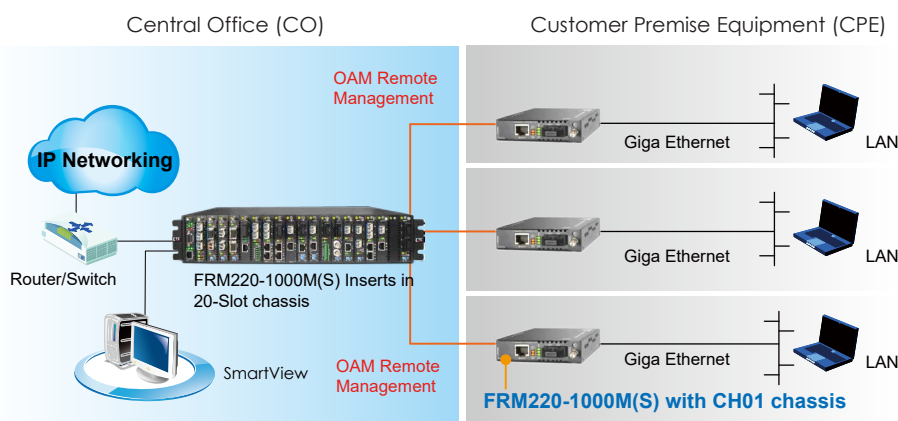
- 1-Port 10/100/1000Base-T to 1000Base-X Converter (FRM220-1000M)
- 1-Port 10/100/1000Base-T to 100/1000Base-X SFP Converter (FRM220-1000MS)
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or manual mode in TP port
- Supports flow control Enable or Disable
- Supports Jumbo Frame 9K Packet
- Ingress/Egress bandwidth control
- Supports 802.3ah-OAM in-band management
- Firmware upgrade via Web (for standalone unit only)
- Management Password Setting (for standalone unit only)
- Dying gasp (remote power failure detection on stand-alone)
- Supports Link Fault Pass-Through (LFPT) Function
- Supports Auto Laser Shutdown (ALS) Function
- Allow IP settings web or console management
- Supports D/D function for SFP fiber transceiver
- Supports 16 Tag VLAN Group
- RMON counters (for standalone unit only)

Specifications

Optical Interface		
Connector	SFP LC, 1x9 (SC)	
Data rate	125/1250Mbps	
Duplex mode	Full duplex	
Fiber	MM 50/125µm, 62.5/125µm SM 9/125µm	
Distance	MM 2km, SM 15/30/50/80/120km WDM 20/40/60/80km	
Wavelength	MM 1310nm, SM 1310,1550nm WDM 1310Tx/1550Rx (type A) 1550Tx/1310Rx (type B)	
Electrical Interface		
Connector	RJ45	
Data rate	10Mbps, 100Mbps, 1000Mbps	
Duplex mode	Half / Full duplex	
Cable	10Base-T Cat.3, 4, 5, UTP, 100Base-TX Cat.5, 5e or higher 1000Base-TX Cat.6 or higher	

Standards	IEEE 802.3, IEEE 802.3u IEEE 802.3ab, 802.3z, 802.3ah, 802.1Q
Indications	LED (Power, FX-Link, LAN Speed, LAN Link)
Power Input	12VDC
Power Consumption	< 6W
Dimensions	Card: 155 x 20.8 x 88mm (D x W x H)
Weight	120g
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
Humidity	10 ~ 90% non-condensing
Certification	CE, FCC
MTBF	65,000 hrs

Application



Ordering Information

Model Name	Description
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP web smart OAM managed media converter card. (Optional SFP)
FRM220-1000M	10/100/1000Base-T to 1000Base-X, Web Smart OAM managed media converter card
Connector Type	Connectivity Distance
SC	002: 2km 015: 15km 030: 30km 050: 50km 20A: WDM 20km A type 20B: WDM 20km B type 40A: WDM 40km A type 40B: WDM 40km B type

Note: This card may use CH01M to provide console for initial TCP/IP settings, or use CH01 with default IP.