



# FRM220-1000M

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

The FRM220-1000M is an IEEE802.3ah OAM compliant copper to fiber Gigabit Ethernet solution designed to make conversion between 10/100/1000Base-T and 100M/1000Base-X with SC, FC or ST connectors. With SNMP and Web-based management in the FRM220, the network administrator can monitor, configure and control the activity of each 802.3ah series card and remotely connected OAM compliant converter. Converter settings include band-width control, duplex, and speed configuration, VLAN tagging and limited Q-in-Q support. When used as stand-alone converters, the 1000M can be managed by a friendly WebSmart user interface via any web browser.

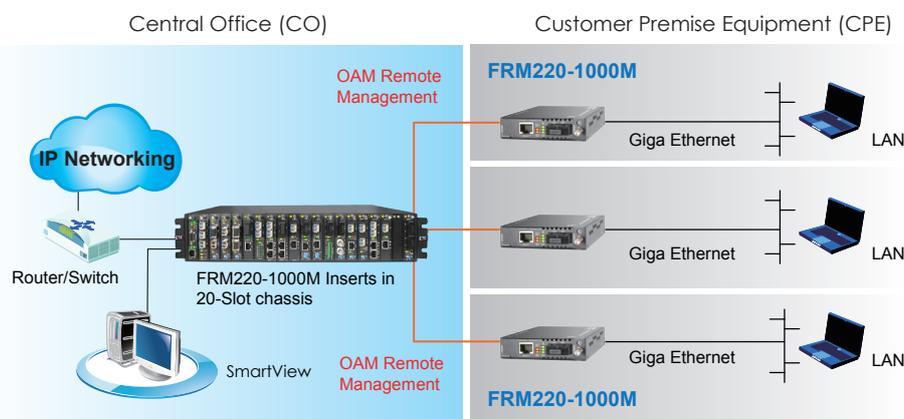
## Features

- 10/100/1000Base-T to 1000Base-X Converter
- 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 Bite
- Ingress / Egress bandwidth control
- Supports IEEE 802.3ah OAM in-band management
- Firmware upgrade via Web
- Management Password Security
- Dying gasp (remote power failure detection)
- Supports Link Fault Pass-Through (LFPT) Function
- Supports Auto Laser Shutdown (ALS) Function
- Allow IP settings Web or Console management on stand-alone.
- Provide Product information for management
- Online local/remote f/w upgrade
- Supports 16 Tag VLAN Group
- RMON counters (for standalone unit only)

## Specifications

<b>Optical Interface</b>	Connector	1x9 (SC)	<b>Standards</b>	IEEE 802.3, IEEE 802.3u IEEE 802.3ab, 802.3z, 802.3ah, 802.1Q				
	Data rate	125/1250Mbps		<b>Indications</b>	LED (Power, FX-Link, LAN Speed, LAN Link)			
	Duplex mode	Full duplex			<b>Power Input</b>	12VDC		
	Fiber	MM 50/125µm, 62.5/125µm SM 9/125µm				<b>Power Consumption</b>	< 6W	
	Distance	MM 2km, SM 15/30/50/80/120km WDM 20/40/60/80km					<b>Dimensions</b>	Card: 155 x 20.8 x 88mm (D x W x H)
	Wavelength	MM 1310nm, SM 1310,1550nm WDM 1310Tx/1550Rx (type A) 1550Tx/1310Rx (type B)						<b>Weight</b>
<b>Electrical Interface</b>	Connector	RJ45	<b>Temperature</b>					
	Data rate	10Mbps, 100Mbps, 1000Mbps		<b>Humidity</b>				
	Duplex mode	Half / Full duplex			<b>Certification</b>			
	Cable	10Base-T Cat.3, 4, 5, UTP, 100Base-TX Cat.5, 5e or higher				<b>MTBF</b>		

## Application



## Ordering Information

Model Name	Description
FRM220-1000M	10/100/1000Base-T to 1000Base-X, Web Smart OAM managed media converter
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.