



# FRM220-1000MS

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

The FRM220-1000MS is an IEEE802.3ah OAM compliant copper to fiber Gigabit Ethernet solution designed to make conversion between 10/100/1000Base-T and 100/1000Base-X with SFP modules. 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 bandwidth control, duplex, and speed configuration, VLAN tagging, Q-in-Q support and SFP DDMI.

## Features

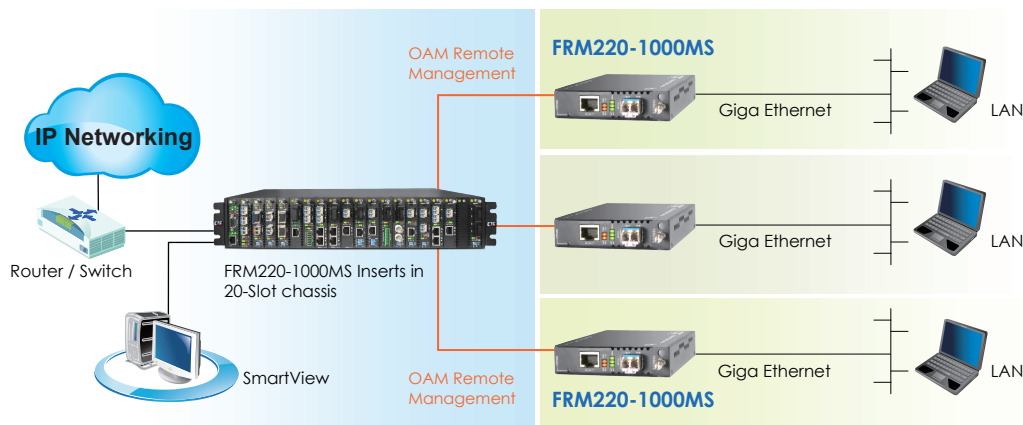
- 1-Port 10/100/1000Base-T to 100/1000Base-X Converter
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or manual mode in TP port
- Supports flow control Enable or Disable
- Supports Jumbo Frame 9K Packet
- Ingress / Egress bandwidth control
- Supports 802.3ah-OAM in-band management (for standalone unit only)
- 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 (for standalone unit only)
- Supports D/D function for SFP fiber transceiver
- Supports 16 Tag VLAN Group
- RMON counters (for standalone unit only)

## Specifications

<b>Optical Interface</b>	Connector	SFP LC
	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)
<b>Electrical Interface</b>	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

<b>Standards</b>	IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3ah, 802.1Q
<b>Indications</b>	LED (Power, FX-Link, LAN Speed, LAN Link)
<b>Power Input</b>	12VDC
<b>Power Consumption</b>	< 4W
<b>Dimensions</b>	155 x 88 x 23mm (D x W x H)
<b>Weight</b>	120g
<b>Temperature</b>	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
<b>Humidity</b>	10 ~ 90% non-condensing
<b>Certification</b>	CE, FCC, RoHS compliant
<b>MTBF</b>	65,000 hrs

## Application



## Ordering Information

Model Name	Description
FRM220-1000MS	10/100/1000Base-T to 100/1000Base-X SFP Web smart OAM managed mediaconverter. (Optional SFP)

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