



## FRM220-1000MS

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

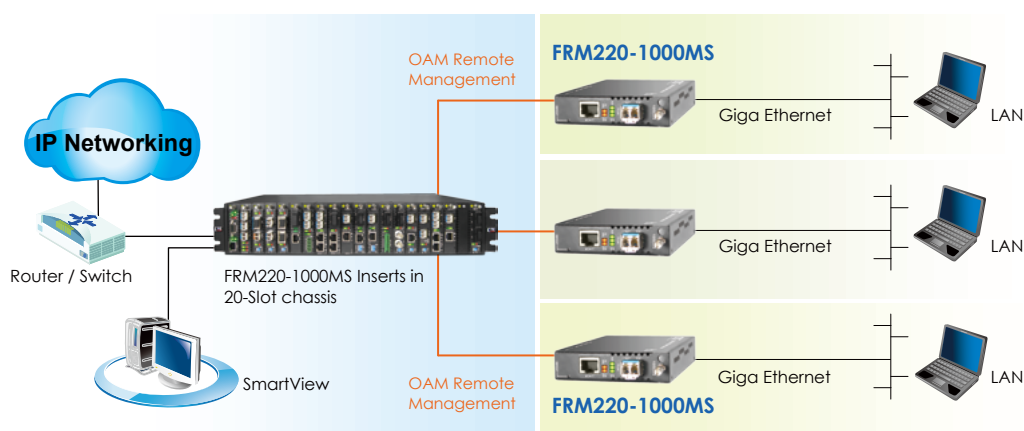
- 1-Port 10/100/1000Base-T to 100/1000Base-X Converter
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or manual mode in TP port
- Supports flow control Enable or Disable
- Supports Jumbo Frame 9K Packet
- Ingress / Egress bandwidth control
- Supports 802.3ah-OAM in-band management
- Firmware 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
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

<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>	< 6W
<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 media converter. (Optional SFP)

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