

# FRM220-MX210

10/100/1000Base-T + 3x 100/1000/2500Base-X and 100/1000Base-X L2+ Gigabit Carrier Ethernet Switch (EDD)



The FRM220-MX210 is a carrier class Ethernet Demarcation Device (EDD) with 10/100/1000Base-T Ethernet ports + 2x 100/1000/2500Base-X and 100/1000Base-X SFP fiber ports which enables EPL (Ethernet Private Line) & EVPL (Ethernet Virtual Private Line) services with advanced carrier Ethernet features per the Metro Ethernet Forum (MEF 9 and 14). By supporting link and service Ethernet OAM schemes, the FRM220-MX210 also provides extensive fault detection and diagnostic capabilities to ensure that actual network use complies with pre-agreed service level agreements (SLAs).

## Features

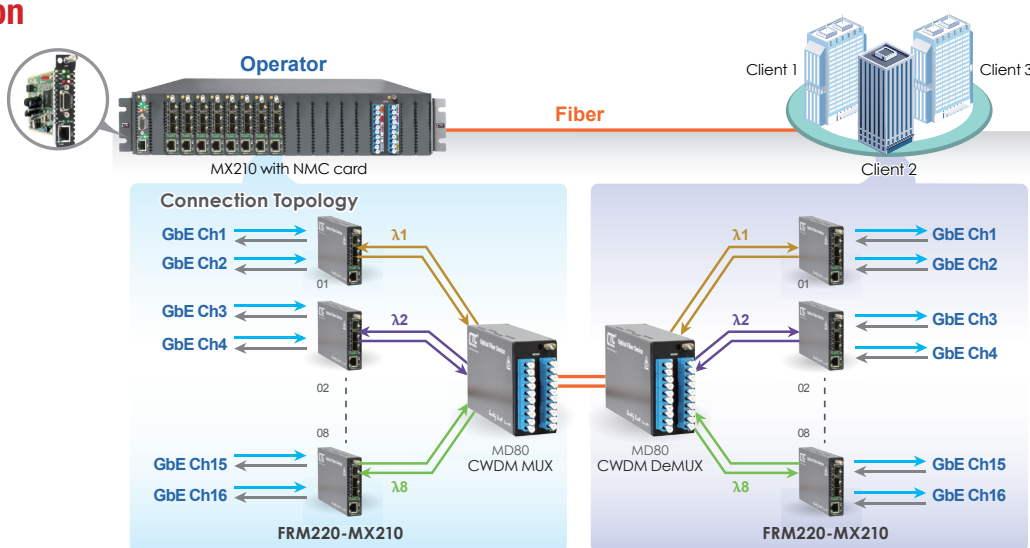
- Complies with MEF CE1.0
- Supports 8K MAC
- Spanning Tree 802.1D, 802.1s, 802.1w
- Supports 802.1Q / 256 active VLANs
- Double VLAN Tagging (C-tag/S-tag) (IEEE 802.1ad) support for ISP application
- Various QoS capability (MAC/port/802.1p/Diffserv)
- Port-based rate limiting
- DHCP Snooping
- IGMP Snooping
- IPv6 support
- IEEE 802.3x and IEEE 802.1x support
- Jumbo frame for up to 9.6K
- Extensive Ethernet OAM support
- IEEE 802.3ah, IEEE 802.1ag, ITU-T Y.1731
- SNMP v1/v2c/v3, Telnet, Web GUI
- IEEE 1588 V2 aware (Optional)

## Specifications

<b>Optical Interface</b>	Port1/Port2	100Base-FX, 1000Base-X or 2500Base-X SFP-LC
	Port3	1000Base-FX or 1000Base-X SFP-LC
<b>Electrical Interface</b>	Port4	10/100/1000Base-T RJ45 MDI/MDIX auto crossover IEEE802.3x flow control
		(Supports manual 10,100,1000Base-T, Full, Half duplex, or n-way (Auto-Negotiation) each channel)
<b>Standards</b>		IEEE 802.3 10Base-T, IEEE 802.3u, 100Base-TX, 100Base-FX, IEEE 802.3z 1000Base-X, IEEE 802.3ab, 1000Base-T
<b>LEDs</b>		PWR, Link (Port1, Port2, Port3) Port4: Link/Speed
<b>VLAN Feature</b>		IEEE 802.1Q tagged VLAN, port based VLAN, MAC based VLAN, protocol based VLAN, private VLAN, IEEE 802.1ad Q-in-Q
<b>Qos Feature</b>		IEEE 802.1p 8 priority queues per port, Cos based on switch port; VLAN ID; TCP/UDP port.

<b>Qos Feature</b>	IEEE802.1p priority tag remarking, DSCP remarking, Port based ingress/egress rate limit
<b>L2 switching Protection</b>	STP, RSTP, MSTP, ITU-T G8031/G.8032
<b>Trunking</b>	IEEE 802.3ad LACP
<b>Power</b>	12VDC
<b>Power Consumption</b>	< 12W
<b>Dimensions</b>	Card: 155 x 20.8 x 88mm (D x W x H)
<b>Weight</b>	120g
<b>Temperature</b>	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
<b>Humidity</b>	20 ~ 80% non-condensing (Operating); 10 ~ 90% (Storage)
<b>Certification</b>	CE, FCC
<b>MTBF</b>	65,000 hrs

## Application



## Ordering Information

Model Name	Description
FRM220-MX210	10/100/1000Base-T + 2x 100/1000/2500Base-X + 100/1000Base-X OAM Managed Switch

## Note:

To support console Interface management, this card must be placed in CH01M chassis.