FRM220-MX210
2x Gigabit Ethernet Multiplexer

FRM220-MX210 is 4-port Gigabit Ethernet switch which able to aggregate two wire-speed Gigabit Ethernet services into one 2.5G uplink, reducing CAPEX by effectively increasing fiber utilization. The Multiplexer can be used either in point-to-point topology, functioning as a media converter for transporting 2 Gigabit Ethernet services over one fiber, or in CWDM systems working as a wavelength converter for extending transmission capacity. FRM220-MX210 is equipped with one 10/100/1000M RJ-45 network management port and three SFP based ports: two 1G Ethernet service ports and one 1G/2.5G uplink port. Additionally its advanced features such as downlink and uplink loop back, auto laser shutdown and remote network management provide carriers a flexible, reliable and cost-effective two Gigabit Ethernet over one wavelength conversion solution.

Features

- Local configuration via DB9 craft port in stand-alone (CH01M)
- Forward 9K bytes Jumbo Packets
- Transports two Gigabit Ethernet over one wavelength doubling the CWDM system transmission capacity
- Facility loopback on both Line / client sides
- Auto Laser Shutdown (ALS)
- Hot-swappable SFP module

- Detect transceiver error Alarm
- Network Management via web, Telnet, SNMP in central FRM220 chassis
- 10/100/1000M Network management port
- Supports Q in Q double tagged frame transparent
- Supports IEEE 802.1Q Tagging and Port based VLAN
- Supports IEEE 802.1D STP
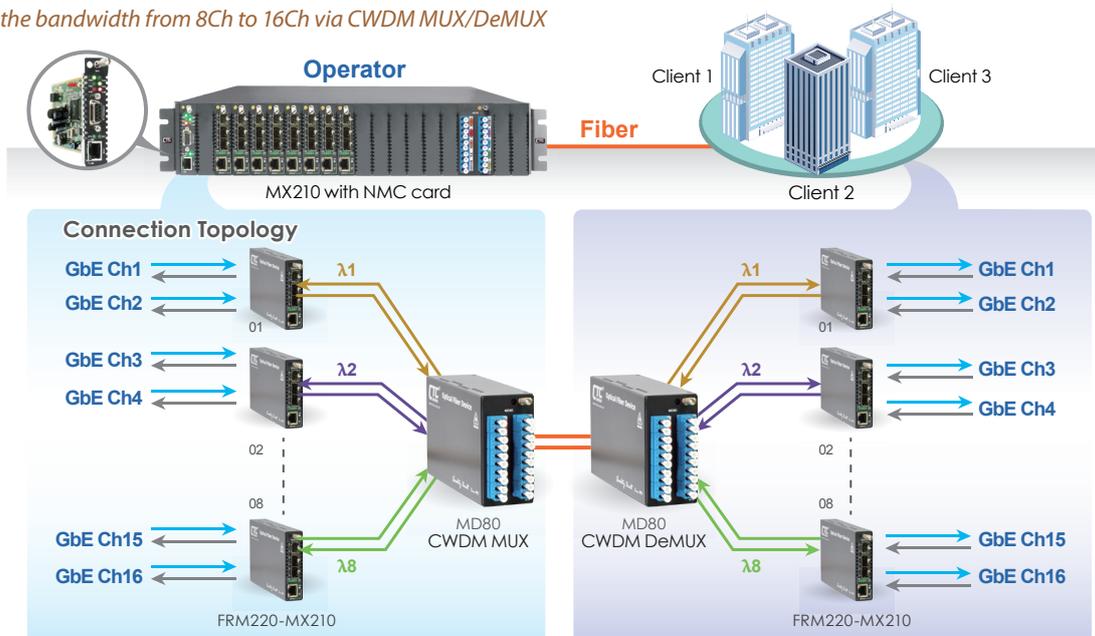- Default port and 802.1p tag priority QoS

Specifications

Optical Interface	Port1/Port2	100Base-FX, 1000Base-X or 2500Base-X
Electrical Interface	Port3	100Base-FX or 1000Base-X
	Port4	RJ45
		10/100/1000Base-T
		MDI/MDIX auto crossover
		IEEE802.3x flow control
Standards	IEEE 802.3, 802.3u, 802.3z, 802.3ab	
LEDs	PWR, Link (Port1, Port2, Port3) Port4: Link/Speed	

Power	12VDC
Power Consumption	< 10W
Dimensions	155 x 88 x 23mm (D x W x H)
Weight	120g
Temperature	0 ~ 50℃ (Operating), -10 ~ 70℃ (Storage)
Humidity	5 ~ 90% non-condensing
Certification	CE, FCC, RoHS compliant
MTBF	65,000 hrs

Application

Double the bandwidth from 8Ch to 16Ch via CWDM MUX/DeMUX

MX210 with NMC card

Connection Topology

FRM220-MX210

MD80 CWDM MUX

MD80 CWDM DeMUX

FRM220-MX210

In-band management MX210

- IP address configuration
- Port Configuration–speed, flow control, max frame, traffic statistics

- VLANs configuration
- Mux Mode configuration
- DDM information

- Device Reset
- Set to Default
- Save Startup Configuration

Ordering Information

Model Name	Description
FRM220-MX210	2-port Gigabit Ethernet Multiplexer for transporting two Gigabit Ethernet over one 2.5G Fiber

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