



FRM220A-1002ES

2x 10/100/1000Base-T + 2x 100/1000Base-X SFP GbE Switch

The FRM 220A-1002ES is a dual copper and dual fiber Gigabit Ethernet switch designed to make conversion between 10/100/1000Base-Triangle and the first of the first open support of the first open supand 100/1000Base-SX/LX with SFP connector. With SNMP and Web-based management in the FRM220 or FRM220A chassis the network administrator can monitor, configure and control the activity of each FRM220A-1002ES switch card locally via the chassis management. Based on a powerful L2 switch architecture, this converter supports bandwidth control, duplex and speed configuration,VLAN tagging, Q-in-Q, QoS, jumbo frames as well as auto laser shutdown, and link fault pass through. When placed stand-alone, this card may only be managed via local serial console when placed in a CH01M single slot type chassis.

Features

- 2-Port 10/100/1000Base-T and 2-Port 100/1000Base-X Switch
- 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 10K Bytes
- Supports 16 Tag VLAN Group
- Supports Double VLAN tag (Q-in-Q)
- Supports Bandwidth control
- Supports Loop Back Test

- Supports Link Fault Pass-Through (LFPT) Function
- Supports Auto Laser Shutdown (ALS) Function
- Supports local management on FRM220A rack management.
- Console management on stand-alone.
- Supports D/D function for SFP fiber transceiver
- Provide Product information for management
- Supports the local management (Monitor or Configure status) by the SNMP manager.

Specifications

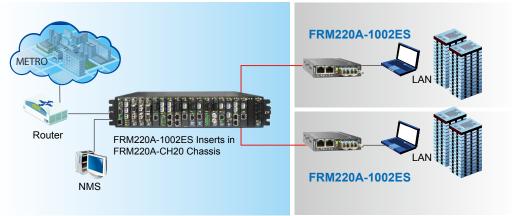
Optical Interface	Connector	SFP LC
	Data rate	125Mbps, 1250Mbps
	Duplex mode	Full duplex
	Fiber	MM 50/125μm, 62.5/125μm
		SM 9/125μm
	Distance	MM 2km, SM 15/30/50/80/120km
		WDM 20/40/60/80km
	Wavelength	MM 1310nm, SM 1310,1550nm
		WDM 1310Tx/1550Rx (type A)
		1550Tx/1310Rx (type B)
Standards	IEEE 802.3, IEEE 802.3u, 802.3z, 802.3ab, 802.1Q, 802.3X, 802.1ad	
Indications	PWR, LNK1, LNK	2, TEST, LAN Link, LAN SPEED

Certification	FCC Part 15 Class A, CE Mark		
Electrical Interface	Connector	RJ45	
	Data rate	10Mbps, 100Mbps, 1000Mbps	
	Cable	10Base-T Cat.3, 4, 5, UTP	
		100Base-TX Cat.5, 5e or higher	
		1000Base-X Cat.5e or higher	
Power	12VDC		
Power Consumption	< 12W		
Dimensions	Card: 155 x 20.8 x 88mm (DxWxH)		
Weight	130g		
Temperature	0~50°C (Operating), -10~70°C (Storage)		
Humidity	0 ~ 95% non-condensing		

Application

Central Office (CO)

Customer Premise Equipment (CPE)



Ordering Information

Model Name	Description
FRM220A-1002ES	2-Port 10/100/1000Base-T and 2-Port 100/1000Base-SX/LX SFP GE switch card (Optional SFP)