



## FRM220A-1002ES

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

The FRM220A-1002ES is a dual copper and dual fiber Gigabit Ethernet switch designed to make conversion between 10/100/1000Base-T and 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.

### Features

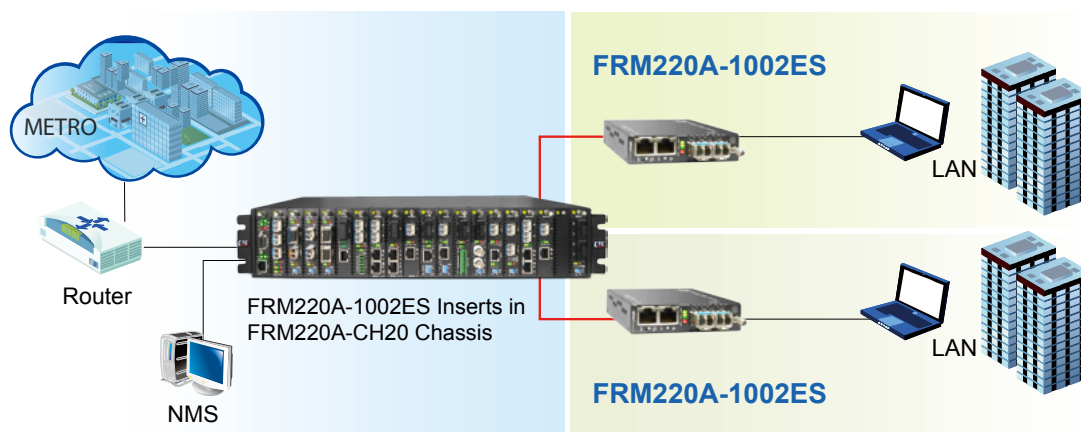
- 2-Port 10/100/1000Base-T and 2-Port 100/1000Base-X Switch
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or manual mode in TP port
- Supports flow control Enable or Disable
- Supports Jumbo Frame 10K Bytes
- Supports 16 Tag VLAN Group
- Supports Double VLAN tag (Q-in-Q)
- Supports Bandwidth 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.
- Supports FRM220A for Ethernet Aggregation

### Specifications

<b>Optical Interface</b>	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)
<b>Standards</b>	IEEE 802.3, IEEE 802.3u, 802.3z, 802.3ab, 802.1Q, 802.3X, 802.1ad	
<b>Indications</b>	PWR, LNK1, LNK2, TEST, LAN Link, LAN SPEED	

<b>Certification</b>	FCC Part 15 Class A, CE Mark	
<b>Electrical Interface</b>	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
	<b>Power</b>	12VDC
<b>Power Consumption</b>	< 12W	
<b>Dimensions</b>	155 x 88 x 23mm (DxWxH)	
<b>Weight</b>	130g	
<b>Temperature</b>	0~50°C (Operating), -10~70°C (Storage)	
<b>Humidity</b>	0 ~ 95% non-condensing	

### Application



### Ordering Information

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

**Note:** Note: This card must use CH01M with serial console, to configure standalone settings.