



FRM220-10/100i

In-Band Management 10/100Base-TX to 100Base-FX Media Converter

The FRM220-10/100i is a 10/100Base Ethernet to 100Base-FX fiber slide-in card converter designed for central and remote applications. With advanced features like bandwidth control, this media converter is targeted for customer premises equipment in metro LAN, campus, enterprise and FTtx applications. By offering in-band management, this converter can be completely controlled and monitored from a centrally located managed rack controlling all converter settings including bandwidth control, duplex, and speed configuration. This media converter is completely transparent to Layer 2 and Layer 3 protocols including IEEE 802.1q, VLAN tag, Q in Q, STP, IPX, IP, etc. When used stand-alone, this converter has no access to management functions except to force Ethernet connection and apply Link Fault Pass-thru via setting of a 4-pole DIP switch.

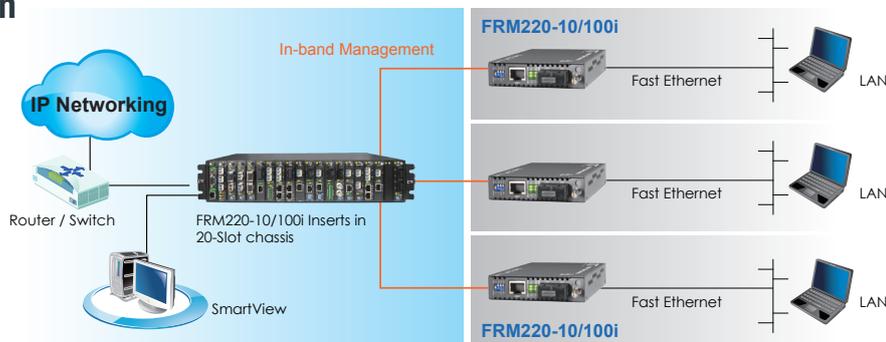
Features

- 1-Port 10/100Base-TX to 100Base-FX Converter
- Auto-Negotiation or forced mode
- Supports remote CPE power fail detect (dying gasp)
- Supports Far End Fault Indication (FEFI)
- Supports Link Fault Pass-Through (LFPT)
- Supports Loop Back Test
- Supports RMON counter
- Auto Laser Shutdown (ALS)
- Auto MDI/MDIX
- Forward 2046 bytes (max.) packets in switch mode
- Forward 9K jumbo packets in converter mode
- Supports Q in Q double tagged frame transparent
- Supports IEEE 802.1q Tag VLAN pass thru
- Supports local / remote In-band management (Monitor and Configure) by the SNMP manager.
- Bandwidth control (Nx32Kbps or Nx512Kbps)
- Supports IEEE 802.3x flow control (Pause)
- Fiber Hardware Reset (FHR)
- Online local / remote f/w upgrade

Specifications

Optical Interface	Connector	1 x 9 (SC, ST, FC)	Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3x, TS-1000	
	Data rate	125Mbps		Indications	LED (Power, FEF, FX-Link, TX-SPD, TX-Duplex, TX-Link)
	Duplex mode	Full duplex			Power Input
	Fiber	MM 50/125µm, 62.5/125µm SM 9/125µm		Power Consumption	
	Distance	MM 2km, SM 15/30/50km WDM 20/40km			Dimensions
Wavelength	MM 1310nm, SM 1310, 1550nm WDM 1310Tx/1550Rx (type A) 1550Tx/1310Rx (type B)	Weight	120g		
Electrical Interface	Connector		RJ45	Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
	Data rate	10Mbps, 100Mbps	Humidity		10 ~ 90% non-condensing
	Duplex mode	Half / Full duplex		Certification	CE, FCC
	Cable	10Base-T Cat.3, 4, 5, UTP 100Base-TX Cat.5, 5e or higher	MTBF		65,000 hrs

Application



Ordering Information

Model Name	Description
FRM220-10/100i	10/100Base-TX to 100Base-FX In-band managed converter
Connector Type	Connectivity Distance
SC,ST,FC	002: 2km 015: 15km 030: 30km 050: 50km 20A: WDM 20km A type 20B: WDM 20km B type 40A: WDM 40km A type 40B: WDM 40km B type

Connector Type Connectivity Distance
FRM220 – 10/100i –
 Example: FRM220 – 10/100i – SC002

Note: This card must use CH01M, with serial console, to configure standalone settings. When connected as a remote to a managed central chassis, this card supports in-band management and only needs a CH01 chassis.