

FRM220A-iMux8

Ethernet to 8E1 Multiplexer



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Inverse Mux

The FRM220A-iMux8 is an E1 inverse multiplexer capable of bundling up to 8 E1 lines for cost-effective connection of 10/100Base-TX or 100Base-FX LANs over multiple E1 transports. The FRM220A-iMux8 inverse multiplexer transmits up to a 15.87Mbps Ethernet bridge channel (GFP-F encapsulated) over 8 E1 links. The FRM220A-iMux8 bridges the gap between E1 and E3, allowing bridges to operate at faster rates. It also provides high speed access to SDH/SONET backbones where the only access services available are E1 lines. The FRM220A-iMux8 supports an E1 attenuation of up to 43 dB on twisted pair or coax cable. This provides an approximate operating range up to 2km (using 22AWG). The FRM220A-iMux8 fully meets E1 specifications including ITU-T G.703 and G.823. The FRM220A-iMux8 features diagnostic capabilities for performing remote loopback. The operator at either end of the line may test both the FRM220A-iMux8 and the line in the digital loopback mode. The Ethernet copper interface supports auto-negotiation and auto MDI/MDIX, allowing plug-and-play Ethernet connection without any additional configuration.

Features

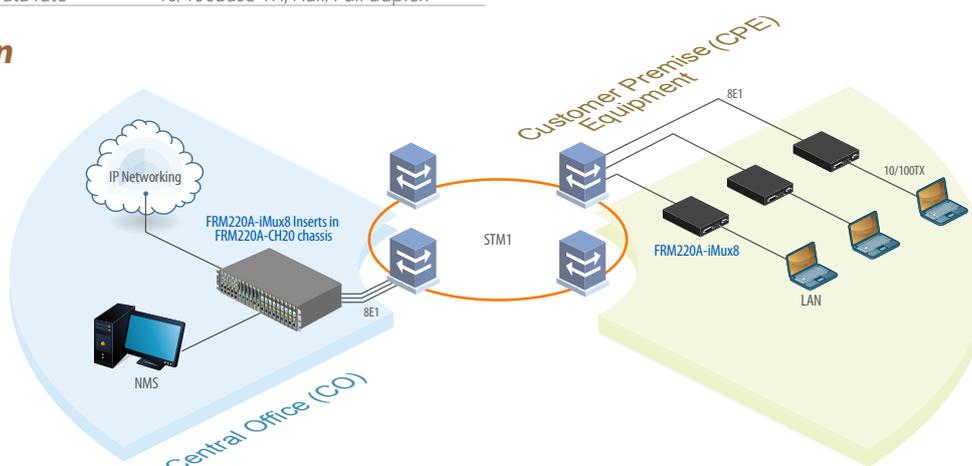
- Connects one Fast Ethernet over 1- 8 E1 links (1.984Mbps to 15.87Mbps)
- Built-in GFP bridge operates at WAN rate
- Maximum 220ms delay variance between E1 link
- Support IEEE 802.1Q VLAN & VLAN trunking
- Unbalanced E1/BNC or balanced E1/RJ45
- Fully compatible with FRM220A chassis
- SNMP management with FRM220A chassis
- LED Alarm indication & Auto-Negotiation
- Standalone RS232 console management via CH01M

Specifications

E1 Interface	Framing	CCS+CRC
	Standard	ITU-T G.703/G.704/G.706 & G.732, G.823
	Bit rate	2.048Mbps± 50ppm (up to 5E1)
	Line code	HDB3
	Clock setting	Internal OSC or recovery clock
	Receive level	-43dB
	Line impedance	75 ohm (BNC) / 120 ohm (RJ45)
	Jitter Performance	Complies with ITU-T G.823
	Pulse Mask	Complies with ITU-T G.703
	Pulse amplitude	Nominal 2.37V ± 10%
	Delay Variance	220ms
	Connector	RJ-45 or BNC
	Diagnostics	Digital remote loopback
Ethernet Interface	Standards	IEEE 802.3, 802.3u
	Data rate	10/100Base-TX, Half/Full duplex

Ethernet Interface	Connector	RJ-45 10/100Base-TX
		Power, ALM, E1 signal loss
Indications	Power, ALM, E1 signal loss, E1 Alarm(AIS, LOF, RAI, LOMF), LAN link /ACT, 10/100M, SD(100Base-FX)	
Power Input	12VDC	
Power Consumption	< 12W	
Dimensions	140 x 88 x 24 mm (D x W x H)	
Weight	130g	
Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)	
Humidity	10 ~ 90% RH (non-condensing)	
Certifications	CE, FCC, RoHS compliant	
MTBF	65,000 hrs	

Application



Ordering Information

Model Name	Description
FRM220A-iMux8T-R	10/100Base-TX to 8 E1 mux card with 8 E1 RJ45 cable
FRM220A-iMux8T-B	10/100Base-TX to 8 E1 mux card with 8 E1 BNC cable

FRM220A - iMux8T - □

Example: FRM220A - iMux8T - R

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.

Cable Type



RJ45 Cable



BNC Cable