FRM220A-Eoe1

Ethernet Bridge over E1

- *HDLC*
- *MTU 1522bytes*
- *Framed / Unframed E1*

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The FRM220-Eoe1 is an Ethernet over E1 Bridge for cost-effective connection of 10/100Base-TX LANs over a single E1 transport. By using standard HDLC encapsulation, the FRM220-Eoe1 is able to transmit up to a 2M bits Ethernet over an E1 link. The FRM220-Eoe1 supports an E1 attenuation of up to 43 dB on twisted pair or coax cable, which provides an approximate operating range up to 2km (using 22AWG). The FRM220-Eoe1 fully meets E1 specifications including ITU-T G.703 and G.823. The FRM220-Eoe1 features diagnostic capabilities for performing remote loopback. The operator at either end of the line may test both the FRM220-Eoe1 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. When placed in FRM220 system, the Ethernet may be aggregated to the chassis's built in Ethernet switch. When placed in a single slot chassis and used standalone without management, the card may be configured by DIP switch.

Features

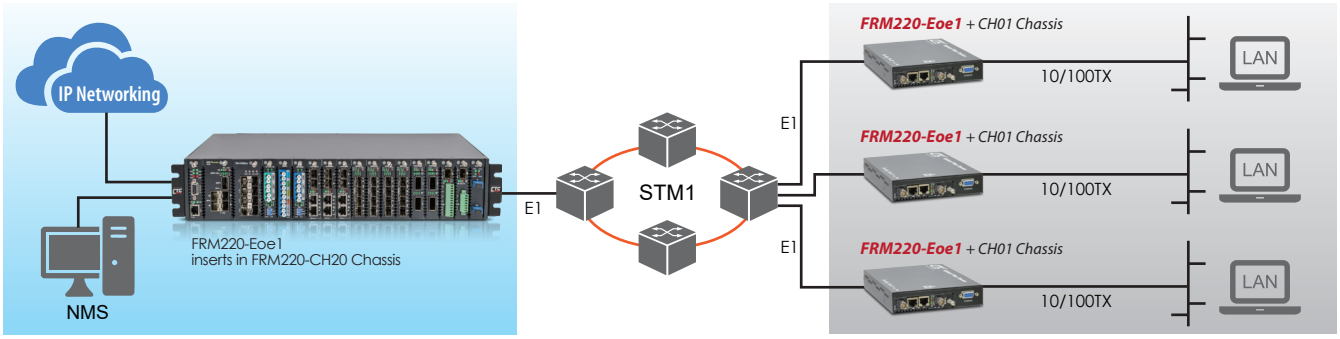
- Connects one Fast Ethernet over E1 links (64k~2048Kbps)
- Built-in HDLC bridge operates at WAN rate
- Auto-Negotiation
- Unbalanced E1/BNC or balanced E1/RJ45
- Fully compatible with FRM220 chassis
- SNMP management with FRM220 chassis
- LED Alarm indication
- Standalone RS232 console management via CH01M

Specifications

E1 Interface	Framing	Framed / Unframed
	MTU	1522bytes (Max.)
	Standard	ITU-T G.703/G.704/G.706 & G.732, G.823
	Bit rate	2.048Mbps± 50ppm
	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 shape	Complies with ITU-T G.703
	Pulse amplitude	Nominal 2.37V ± 10%
	Delay Variance	220ms
	Connector	RJ-45, BNC
	Diagnostics	Digital remote loopback
Ethernet Interface	Standards	IEEE 802.3, 802.3u
	Data rate	10/100Base-TX, Half/Full duplex
	Connector	RJ-45 10/100Base-TX
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	< 6W	
Dimensions	155 x 88 x 24mm (DxWxH)	
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



Central Office (CO)

Customer Premise Equipment (CPE)

Ordering Information

Model Name	Description
FRM220-Eoe1	10/100Base-TX to E1 HDLC bridge card