FRM220-Serial

RS232/485 over Fiber



The FRM220-Serial provides a fiber modem solution to extend asynchronous RS-232, RS-422 or RS-485 transmission distance up to 2km over multimode fiber or up to 120km over single mode fiber. The converter is equipped with multiple interface circuits for connection to RS-232 or RS485/422 (2 or 4 wire, full or half duplex). The FRM220-Serial secures data transmission over EMI resistant fiber at speeds up to 256kbps for RS-232 or up to 1024kbps for RS485/422. When the FRM220-Serial/485 card is placed in the FRM220 rack with NMC management, in-band management allows configuring and viewing the card and remote converter's status, type, version, fiber link status, data link status and alarms. When placed in a single slot chassis and used standalone without management, the card may be configured by DIP switches.

Features

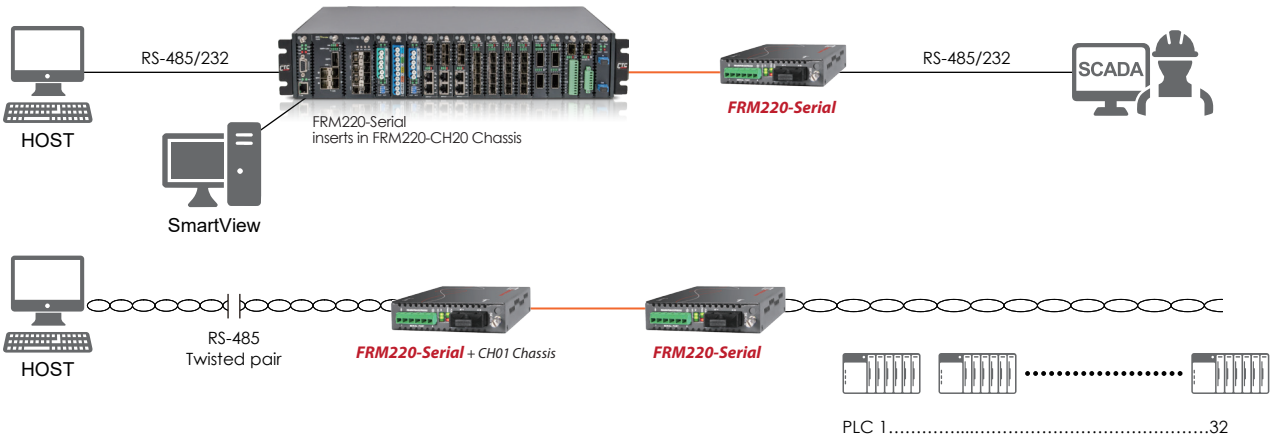
- Extend asynchronous serial transmission up to 120km over fiber
- In-band network management via terminal, Web or SNMP in FRM220-CH20 chassis with NMC
- Selectable data interface for RS-232/485
- RS232/Async. 3W or 5W up to 256Kbps
- RS485/Async. 2W (half duplex) or 4W (full duplex) up to 1Mbps
- Standalone RS232 console management via CH01M
- Software selectable two wires (half duplex) or four wires (full duplex) RS-485

Specifications

Optical Interface	Connector	FRM220-Serial: Fixed SC, ST, FC
	Data rate	36.864Mbps
	Line coding	Scrambled NRZ
	Bit Error Rate	Less than 10-10
	Fiber	MM 62.2/125μm, 50/125μm
		SM 9/125μm
	Distance	MM 2km, SM 15/30/50km, WDM 20/40km
	Wavelength	MM 1310nm, SM 1310,1550nm
		WDM 1310Tx/1550Rx (type A)
		1550Tx/1310Rx (type B)
Electrical Interface	Connector	6 pins Terminal block
	Data Signal Formats	RS-485 2-wire, RS-232 RTS/CTS 5-wire, RS-232 3-wire
	Baud Rate	RS-422, RS-485 up to 1024kbps
		RS-232 up to 256kbps
	Bit Error Rate	Less than 10-10
Standards	EIA/TIA RS-485, RS-232	
LEDs	Power, FX Link, DI, DO, Test	
Power Input	12VDC	
Power Consumption	< 6W	
Dimensions	159.5 × 20.8 × 88mm (D×W×H)	
Weight	130g	

Temperature	0 ~ 50°C (Operating), -10 ~ 70°C (Storage)
Humidity	10 ~ 90% non-condensing
Certification	CE, FCC
MTBF	65,000 hrs

Application



Ordering Information

Model Name	Description
FRM220-Serial	RS-232/485 fiber converter card

Connector Type / Connectivity Distance

FRM220 – Serial – □□□□□

Example: FRM220 – Serial – SC002

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