



RS485 / 422 / 232 Fiber Converter FRM220-Serial

The FRM220-Serial/485 provides a fiber converter solution to extend asynchronous RS-485 or RS-232 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 RS-485/422 (2 or 4 wire, full or half duplex). The FRM220-Serial secures data transmission over EMI resistant fiber at speeds up to 460kbps for RS-232 or up to 1024kbps for RS-485/422. When the FRM220-Serial/485 card is placed in the FRM220 rack with SNMP management, in-band management allows viewing the card and remote converter's status, type, version, fiber link status, data link status and alarms. Both card and remote can be configured to enable or disable the port, reset the port and set the interface type.

Features

- Extend asynchronous serial transmission from 2km to 120km over fiber
- In-band network management via terminal, web or SNMP in FRM220-CH20 chassis
- Software selectable data interface for RS232/ 422/ 485
- Software selectable two wires (half duplex) or four wires (full duplex) RS485
- Software selectable three or five wires RS232
- Speeds up to 256kbps for RS232 (Async. mode)
- Speeds up to 1Mbps for RS485/ 422

Optical Interface

Connector	1x9 (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 15/30/50/80/120km, WDM 20/40/60/80km
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	RS485 2-wire RS422 4-wire RS232 RTS/CTS 5-wire RS232 3-wire
Baud Rate	RS422, RS485 up to 1024kbps RS232 up to 256kbps
Bit Error Rate	Less than 10 ⁻¹⁰

Standard

EIA/TIA RS485, RS422, RS232

LEDs

Power, FX Link, DI, DO, Test

Power Input

Card : 12VDC
Standalone : AC, DC options

Power Consumption

< 5W

Dimensions

155 x 88 x 23mm (D x W x H)

Weight

120g

Temperature

0 ~ 60°C (Operating), -10 ~ 70°C (Storage)

Humidity

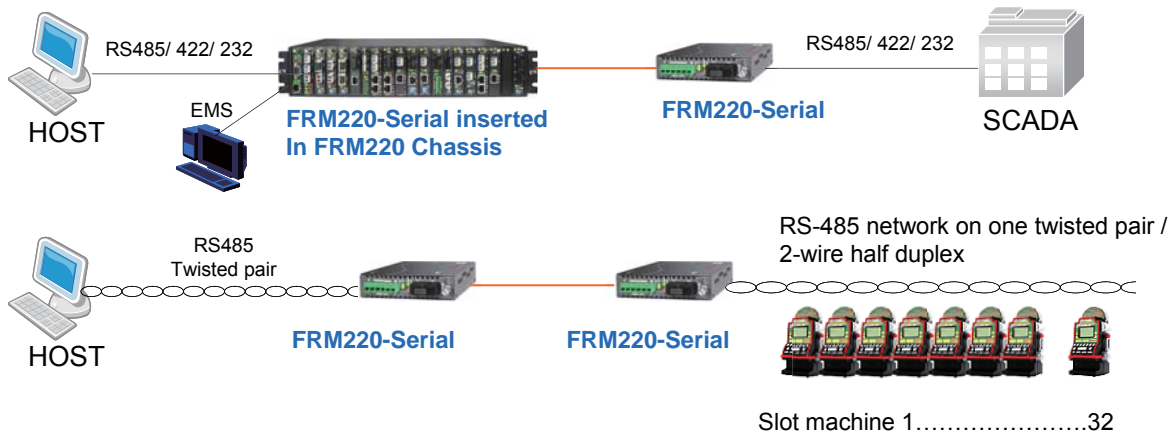
10~90% non-condensing

Certification

CE, FCC, LVD, RoHS

MTBF

65,000 hrs (25°C)



Ordering Information

- FRM220-Serial: RS485/422/232 media converter
- Smart View Element Management System (EMS)
- SV-PLF-05 (5, 25, 50): Platform Server (5, 25, 50 admissions)
- SV-AGT-50 (50,100,200,500): Device Agent (50, 100, 200, 500 Devices)
- SV-Fiber: FRM220 Managed Module