

## Managed Family

### Slide-in card & stand-alone Serial RS-485/232 fiber converter

## FRM301-Serial FIB1-Serial, FIB2-Serial



The FRM301-Serial 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 FRM301-Serial secures data transmission over EMI resistant fiber at speeds up to 256kbps for RS-232 or up to 1024kbps for RS-485/422. When the FRM301-Serial card is placed in the FRM301 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 and set the interface type.

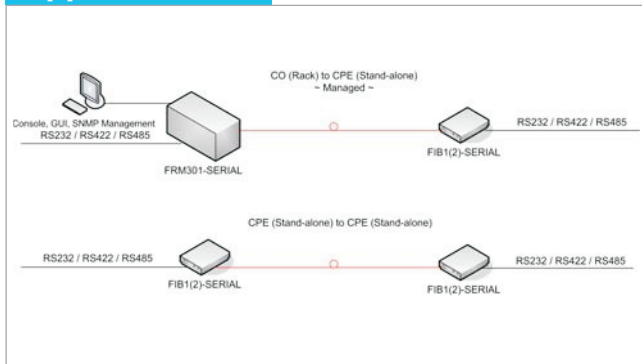
### Features

- Extends asynchronous serial transmission from 2km to 120km over fiber
- In-band management via terminal, GUI or SNMP in FRM301-CH 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

### Specifications

Ports	Connector : 1x9 (SC, ST, FC)
Optical Interface :	Data rate : 36.864Mbps
	Line coding : Scrambled NRZ
	Bit Error Rate : Less than 10 <sup>-10</sup>
	Cable type : MM 62.2/125µm, 50/125µm. SM 9/125µm
Distance :	MM 2km, SM 15/30/50/80/120km, WDM 20/40/60/80km
	Wavelength : 1310nm, 1550nm
Electrical Interface :	Connector : 6 pins Terminal block
	Data : Signal Formats RS485/422 2-wire, 4-wire RS232 RTS/CTS 5-wire, 3-wire
	Baud Rate : RS422, RS485 up to 1024kbps RS232 up to 256kbps

### Application



Standard	EIA/TIA RS485, RS422, RS232
LEDs	Power, DI, FX Link, Test
Power	FIB1:DC In 9V, FIB2:AC 100 ~ 240V/ DC 24 ~ 72V
Power Consumption	< 5W
Dimensions (D x W x H)mm	FRM301/FIB1: 123 x 86 x 20mm
	FIB2: 192 x 86 x 30mm
Weight	FRM301: 290g, FIB1:340g, FIB2: 550g
Temperature	0~50°C (Operating) ,0~70°C (Storage)
Humidity	10~90% non-condensing
Certification	CE, FCC, LVD, RoHS
MTBF	65,000 h (25°C)

### Ordering Information

- **FRM301-Serial** Serial (RS485/422/232) to fiber slide-in card
- **FIB1-Serial** Serial (RS485/422/232) to fiber stand-alone converter
- **FIB2-Serial** Serial (RS485/422/232) to fiber with AC or DC power built-in



FIB2-Serial