



## 31 Channel RS232/RS485/RS422 Fiber Modem

OP-FM-31RS232/485/422



Shenzhen Optostar Optoelectronics Co., Ltd

2013. 05 (Version 2)

## Overview

OPTOSTAR OP-FM-31RS232/485/422 Fiber Modem provides 31 Channel RS232/485/422 transmission on fiber. OP-FM-31RS232/485/422 Fiber Modem breaks through contradictions between traditional serial interface communication distance and communication rate, besides, it also can solve electromagnetic interference, ground ring interference and lightning damage. The device greatly improves reliability, security and confidentiality of data communication. It is widely used for various industrial control, process control and traffic control occasions, especially for Bank, and Power and other sectors and systems which have special requirements of electromagnetic interference environment. RS232/RS485/RS422 channel can transmit adaptable serial data asynchronously 0Kbps-115200Kbps baud rate.

## Product Features

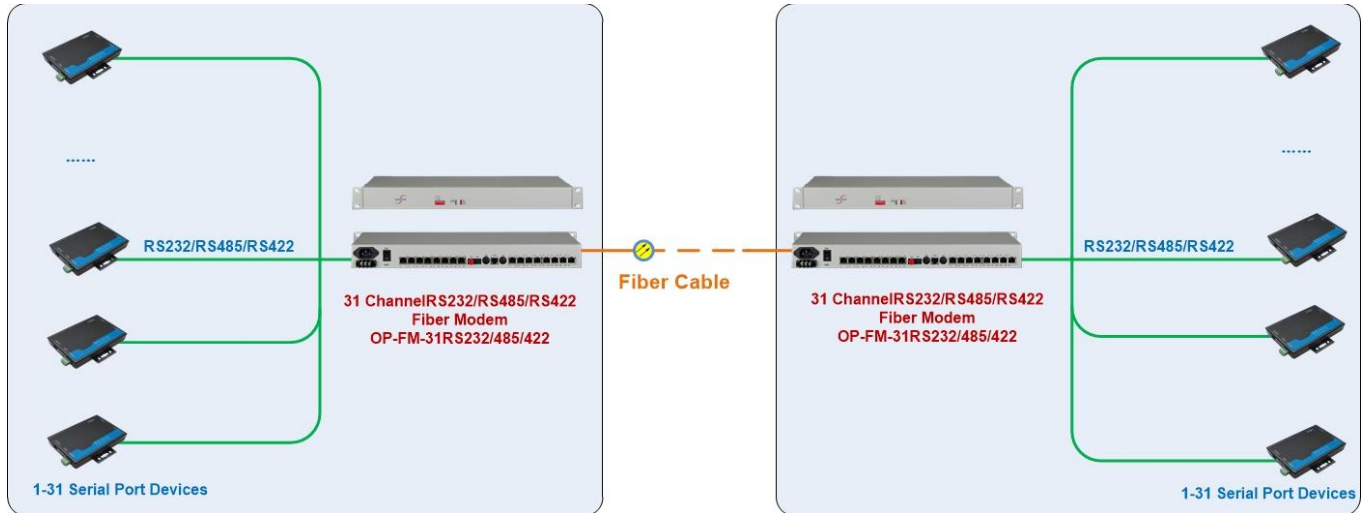
- Based on self -copyright IC
- Support 3 line RS232 (TXD,RXD,GND), support for flow control CD,DSR,CTS
- Have three Loop Back Mode: E1 interface Loop Back (ANA)、RS232/485/422 interface Loop Back(DIG)、Command the remote RS232/485/422 interface Loop Back(REM)
- RS232/RS485/RS422 supports hot-plug, supports DTE or DCE device interconnection
- RS232/RS485/RS422 channel can transmit adaptable serial data asynchronously 0Kbps-57600Kbps baud rate
- Have pseudo random code test function, easily line opened, can be used as a 2M BER Tester
- Serial port interface lightning-protection reached IEC61000-4-5 (8/20  $\mu$  S) DM(Differential Mode): 6KV, Impedance (2 Ohm), CM(Common Mode): 6KV, Impedance (2 Ohm) standard
- AC 220V, DC-48V, DC+24V, DC Power and Polarity-Free

**Technical Parameter**

<b>OP-FM-31RS232/485/422 31 Channel RS232/RS485/RS422Fiber Modem</b>	
<b>Optical interface</b>	
<b>Multi-mode Fiber</b>	
Diameter of fiber core	50/125um, 62.5/125um
Transmission distance	5Km @ 62.5 / 125um single mode fiber, attenuation (3dbm/km)Wave Length: 820nm
Transmitting power	-12dBm (Min) ~-9dBm (Max)
Receiver sensitivity	-28dBm (Min)
Link budget	16dBm
Connector	SC/FC
<b>Single-mode Fiber</b>	
Diameter of fiber core	8/125um, 9/125um
Transmission distance	40Km @ 9 / 125um single mode fiber, attenuation (0.35dbm/km)
Wave Length	1310nm
Transmitting power	-9dBm (Min) ~-8dBm (Max)
Receiver sensitivity	-27dBm (Min)
Link budget	18dBm
Connector	SC/FC
<b>Serial interface</b>	
Standard	EIA/TIA-232 RS-232 (ITU-T V.28) EIA/TIA-422 RS-422 (ITU-T V.11) EIA/TIA-485 RS-485 (ISO/IEC8284)
Serial Interface	RS-422: TXD+, TXD-, RXD+, RXD-, Signal Ground RS-485 4 wires: TXD+, TXD-, RXD+, RXD-, Signal Ground RS-485 2 wires: Data+(Correspond TX+), Data- (Correspond TX-), Signal Ground RS-232: RXD, TXD, Signal Ground
<b>Dimension</b>	
Product Size	216X140X31mm(WXDXH)
Simple packaging	274X193X84mm(WXDXH)
Piece Weight	1.2KG
<b>Operation Environment</b>	
Operating temperature	-10° C ~ 50° C
Storing temperature	-40° C ~ 80° C
Relative humidity	5%~95 % (no condensation)
No causticity and solvent, dust free, and no strong magnetic interference.	

<b>Power</b>	
Voltage	AC180V ~ 260V; DC -48V; DC +24V
Consumption	≤10W
<b>Warranty</b>	2 Year Warranty, Life-time Maintenance

### Application



### Order Information

Model	Description
OP-FM-31RS232/485/422	31 Channel RS232/RS485/RS422 Fiber Modem

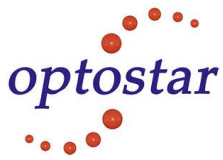
### Package include

No	Package List
1	31 Channel RS232/RS485/RS422 Fiber Modem
2	User Guide
3	Warranty Card

### Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by OPTOSTAR before they become applicable to any particular order or contract. In accordance with the OPTOSTAR policy of continuous improvement specifications may change without notice.

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## Contact OPTOSTAR

### **Shenzhen Optostar Optoelectronics Co., Ltd**

Address:A-14,Haide Building,the Intersection of Nanxin Road and Haide Second Road Nanshan District Shenzhen,China .

Tel: +86-755-26400198 +86-755-26400288 Fax: +86-755-26411001

Email: [info@optostar.com.cn](mailto:info@optostar.com.cn)

Skype:ouyangroya

Web: [www.optostar.com.cn](http://www.optostar.com.cn)