



AVCOMM®

SEVR-M2-F

Datasheet

Aiming to create better and safer working environments and life experiences through the products we deliver.



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Industrial RS-232/422/485 to Fiber Converter

SEVR-M2-F

SEVR-M2-F is multi-functional fiber optic MODEM supporting asynchronous RS-232, RS-485, and RS-422 communication interfaces, which is the best choice for connecting RTUs to Hosts or SCADA. It supports RS-232, RS-485 and RS-422 asynchronous communication protocols, and can mix two RS-232, RS-485, or RS-422 interfaces at the same time. It supports 2-wire (half-duplex) RS-485 and 4-wire (full-duplex) RS-422 working modes. The RS-485 method of the SEVR-M2-F supports data transmission control (TXD or SD), which improves the ability to adapt to various software types and simplifies the control method. The communication distance can reach up to 4 kilometers for multi-mode and 20 kilometers for single mode. The max transmission rate of RS-232 is 115.2KBPS, and the max transmission rate of RS-485/RS-422 is 460KBPS.



Product Features

- Support RS-232/RS-485/RS-422 interface
- Asynchronous transmission: point-to-point, 460Kbps
- Transmission distance: 3,000 meters for multi-mode, 18,000 for single-mode
- Operating temperature: -40°C to +85°C, humidity 5% to 95%
- Operating wavelength: 1310nm (multimode), 1310nm (single-mode)
- Electrical interface:
 - RS-232: use terminal block
 - RS-485/422: use terminal block
 - Optical Interface: ST Interface (SC/FC Interface Optional)
- RS-232 interface features: standard RS-232 three-wire interface +/-15KV (anti-static) ESD protection supports 115.2Kbps max rate
- RS-485/422 interface features: port auto negotiation is used to realize self-adaptation from port to rate adjustment, no need to switch settings, and 15KV (anti-static) ESD protection supports up to 128 polling



Ordering Information

Model Name	Description
SEVR-M2-F	Serial to Fiber Converter, 1* RS-232/485/422, 1* Fiber Port, -40~85°C, single DC (12V~48V) power or AC(100V~264V) optional



Technology

Items		Parameters	
		Multimode	Single-mode
Optical Properties	Wavelength (nm)	850/1310	1310
	Distance (km)	3	18
	Transmitting power (dBm)	-3 ~ -10	-3 ~ -7
	Receive sensitivity (dBm(≤))	-18	-18
	Light saturation (dBm)	-3	-3
	Optical loss (dBm/km)	0.35	0.35
	Fiber Optic Interface	SC, FC, ST interface optional	
Others	Rate	460Kbps	
	Operating mode	Full duplex/half duplex mode	
	Power	DC12-48V/1W or AC100 ~ 240V/1W	
	Working temperature	-40 ~ 85°C	
	Storage temperature	-40 ~ 85°C	
	Humidity	5% ~ 90%	
	dimension	100mm×80mm×34.5mm	

Pin definition

PIN	Signal Definition	RS-422 Full duplex	RS-485 half duplex
1	T/R+	Send (A+)	RS-485 (A+)
2	T/R-	Send (B-)	RS-485 (B-)
3	RXD+	Receive (A+)	Empty
4	RXD-	Receive (B-)	Empty
5	TXD	RS-232 (Send)	
6	RXD	RS-232 (Receive)	
7	GND	RS-232 (GND)	

Installation dimensions

Unit: mm

