

RB-SERIAL

RS-232/485/422 Serial to Fiber Converter Set



Product Features

- 1x RS-232 3-wire and 1x RS-485/RS-422 2 or 4 wire interface simultaneous transport
- Support synchronization, point-to-point and point-to-multipoint transmission
- Automatic signal detection rate, plug and play, no settings required
- EMI electrical interference resistant and harsh environment hardened
- Serial port transmission rates up to 256 Kbps
- 1500W surge protection and 15KV electrostatic protection built-in
- Supports multi-mode (3000 feet) or single mode (up to 14mi) single fiber BiDi transmission

Technical Indexes

Fiber index	
Wavelengths	1310/1550nm
Rate of Optical Port	155Mbps
Tx Power	> -8db
Rx Sensitivity	> -24db
Fiber connector	Single SC type
Data Port	
Standard compliance	Meets EIA RS-232, RS-485 and RS-422 standards
Physical interface	7-Pin block industrial terminal

Baud rate	50 bps to 256 Kbps (supports non-standard baud rates)
Simultaneous use of ports	2 (both RS-232 and RS-485/422 can be used simultaneously)
RS232	3-wire interface(Rx, Tx, Ground), full duplex, point to point transmission only Maximum electrical reach is ~50 feet for RS-232 3-wire interface
RS485	2-wire half-duplex, can run point to multi point Maximum RS-485 electrical reach ~3800 feet, transmission max. rate decreases as transmission distance is increasing
RS422	4-wire, full duplex Maximum RS-422 electrical reach ~3800 feet, transmission max. rate decreases as transmission distance is increasing
RS485 circuit	
RS-485 pull up resistance/pull down resistance	1 k Ω , 150 k Ω
RS-485 terminal resistance	120 Ω
Power	
Input current	1A
Input voltage	5V
Overload current protection	Support
Power consumption	<1.5W
Mechanical Specs	
Casing	Aluminum alloy
Product net weight	0.25kg
Installation	Desktop, Wall mount
Operating Environment	
Operating temperature	-20 to 70°C
Storage temperature	-40 to 85°C
Operating humidity	5 to 95% (non-condensing)
MTBF	>100,000 hours

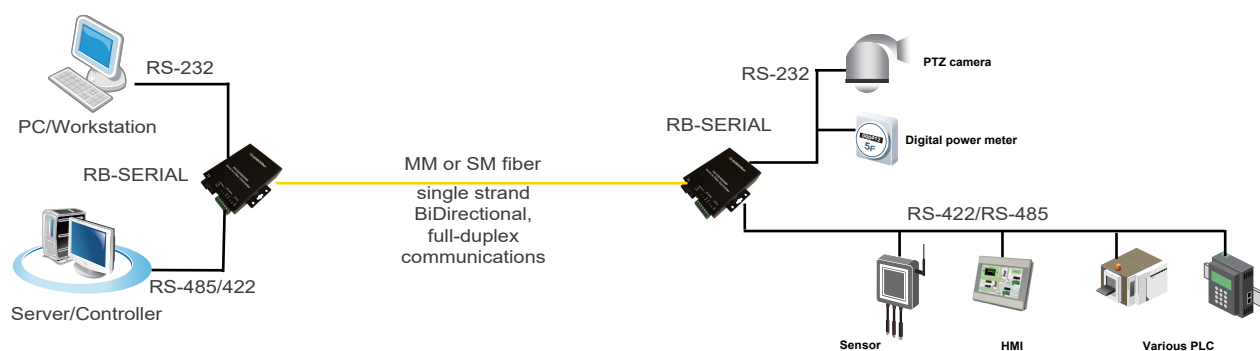
Part Number

P/N	Configuration	Product Interface and Description
RB-SERIAL	RS-232/485/422 Serial to Fiber Converter, SET of TWO	7-Pin industrial terminal supporting simultaneous RS-232 and RS485/422 operation, Transmit and Receive SET, operating on either one strand of MMF up to 1Km or SMF up to 20Km (only one strand of fiber required), SC simplex optical connector

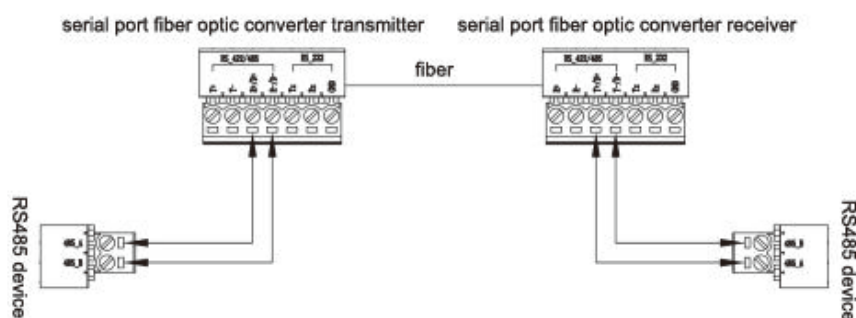
LED Indicators and Markings

LED indicator status (both units have same indicators)	
PWR/FIBER light:	BLINKING - Power and Fiber link are operational, OFF – no power or no fiber link
TXD light:	BLINKING - Data transmitting, OFF – No data
RXD light:	BLINKING – Data receiving, OFF – No data
7-Pin industrial terminal pin assignment	
T+	RS422 data transmit +
T-	RS422 data transmit -
R+/D+	RS485A or RS422 receive +
R-/D-	RS485B or RS422 receive -
RS232T	RS232 transmit
RS232R	RS232 receive
GND	Ground wire

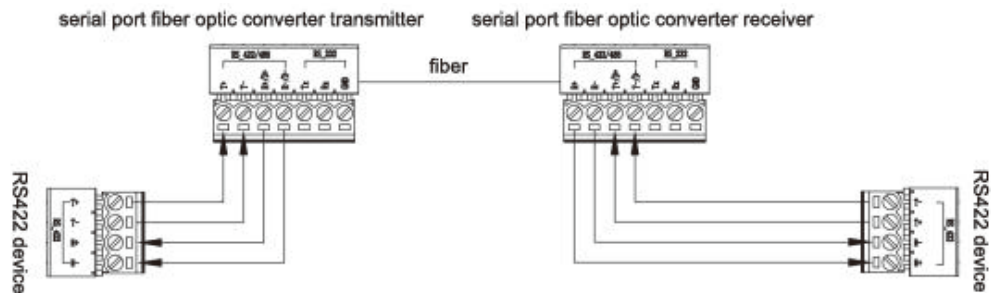
Connection diagram (single strand fiber required: MM up to 1Km or SM up to 20Km)



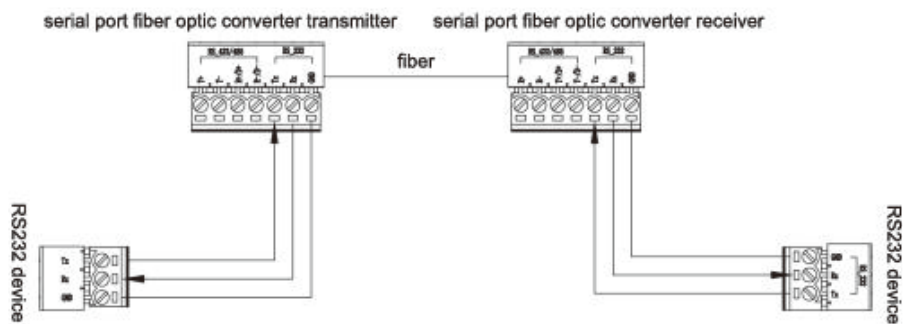
Pinout for RS-485 application



Pinout for RS-422 application (full-duplex)



Pinout for RS-232 3-wire application



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