



Serial Data Fiber Optic Converter

Transmit RS-232/422/485 serial data over fiber with maximum reliability

The RLH Serial Data Fiber Optic Converter transmits RS-232/422/485 serial data over fiber optic cable. It transmits simultaneously to each serial port, providing the option to interface between one of three different serial data communication standards.

Designed for operation in harsh environments, this fiber converter allows for long distance communication while providing immunity to EM/RFI and transient surges along the fiber path. This rugged, industrial grade converter is ideal for applications where reliability is critical, and is suitable for use in non-temperature controlled environments.

A comprehensive set of LEDs on the front panel indicate power status, fiber status, and RS-232/422/485 activity. Features include redundant power inputs with a system alarm contact for remote monitoring, and it includes both a DIN rail clip and wall mount ears for ease of installation. This system is designed, engineered, and assembled in the USA, and covered by our Lifetime Warranty.



Serial Data Fiber Optic Converter

Features

System

- Transparent RS-232/422/485 extension over fiber
- Compatible with all MSA Compliant Gigabit SFPs
- Supports RS-232 baud rates of 50 bps to 128 kbps
- Supports RS-422/485 baud rates of 50 bps to 2.5 Mbps
- Rotary Switch for RS-422/485 pull high/low resistor value
- Compatible Protocols: DNP, Modbus, DF1, Profibus, BACnet MS/TP, asynchronous HDLC
- Supports Fiber Ring Configuration

Environment

- Hardened to operate in -40°F to +158°F (-40°C to +70°C)
- DIN rail or Wall Mount (Wall mount ears included)

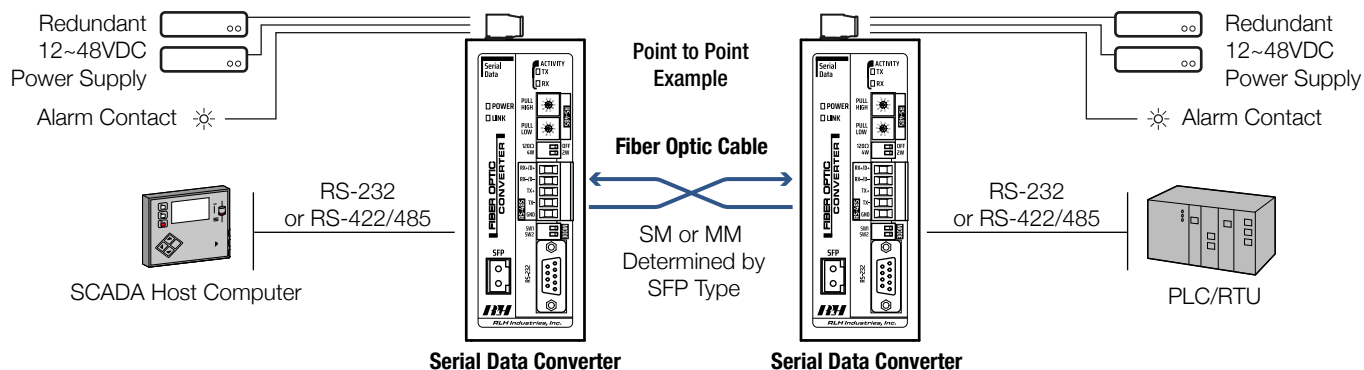
Power

- Redundant Power Inputs (12~48VDC)

Quality

- Designed, Engineered, and Assembled in the USA
- Covered by our Lifetime Warranty

Application





RS-232 Specifications

DB-9 Port (Female)	PIN 2 - RXD, PIN 3 - TXD, PIN 5 - GND
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RS-485/422 Specifications

4 Wire Mode	TX-, TX+, RX-, RX+, Ground		
2 Wire Mode	TX+ (Data +), TX- (Data -), Ground		
DIP Switches	1200Ω/OFF	120-Ohm Termination Resistor	(Default Position is OFF)
	4W/2W	2-Wire/4-Wire RS-485 configuration	(Default Position is 2W)
	SW1	Reserved	(Default Position is OFF)
	SW2	Fiber Ring Mode	(Default Position is OFF)
RS-422/485 Biasing	Pull High/Low Rotary Switches	9.67 kilo-ohm, 4.9 kilo-ohm, 3.29 kilo-ohm, 993 ohm, 903 ohm, 828 ohm, 769 ohm, 496 ohm, 473 ohm (default), 240 ohm	

General Specifications

Fiber Port	1 Gigabit SFP Slot, Accepts MSA compliant 1.25Gbps SFPs (Sold separately)		
LED Indicators	Power, Fiber Link, Serial Data Activity (TX/RX)		
Power Input	Standard model	12~48VDC (11~53V)	
	-A powering option 125VDC (42~160V)		
	Dual redundant power options - Polarity insensitive		
Power Consumption	8 Watts Maximum		
DC Input Isolation (In/Out)	1.5KV		
Overcurrent Protection	1.0A	Automatic Recovery	
Latency	400ns		
System Status Alarm	Normally Open / Closed Relay (SPDT)		
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)	
	Operating	-40°C to +70°C (-40°F to +158°F)	
Dimensions	H 5.2" x W 2.2" x D 4", (131mm x 56mm x 102mm) - not including DIN clip		
Weight	1.6 lbs. (0.73kg)		
Mounting	Standard T-35 DIN rail clip and wall mount ears (Included)		
Humidity	95% non-condensing		
Safety	FCC Class A, CE, RoHS		
Warranty	Lifetime - Visit www.fiberopticlink.com for warranty information and coverage details		

Ordering Information

Description	Part Number
Serial Data Fiber Optic Converter, RS-232/422/485, 1 SFP Slot, Powered by 12-48VDC	FBX-SERIAL-1

- A complete system requires two (2) units
- Add **-A** to the end of the part number for 125VDC powering option