



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 made in the U.S.A. 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)

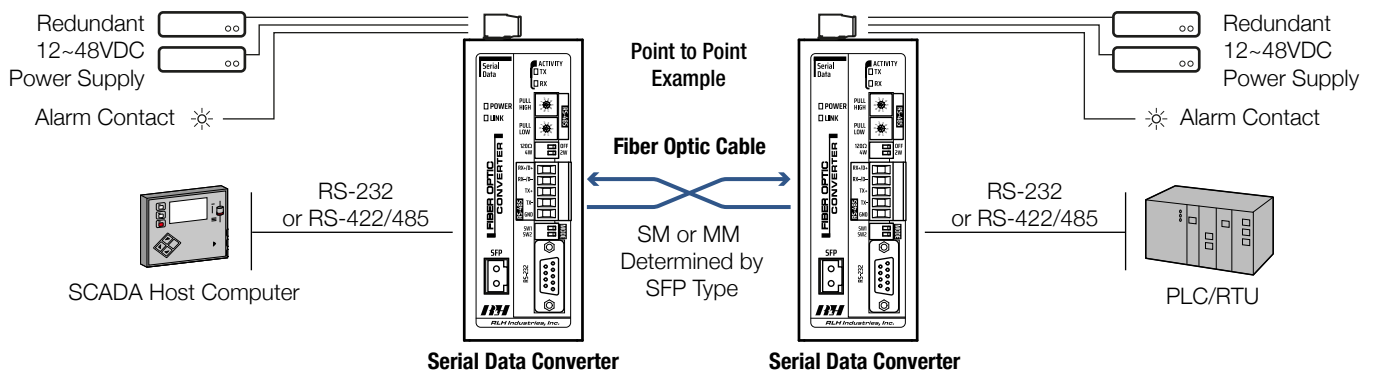
Power

- Redundant Power Inputs (12~48VDC)

Quality

- Made 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
---------------------------	---------------------------------------

RS-485/422 Specifications

4-Wire Mode	TX-, TX+, RX-, RX+, Ground	
2-Wire Mode	TX+ (Data +), TX- (Data -), Ground	
DIP Switches	Switch 1	ON/OFF 120-Ohm termination resistor (Default Position is OFF)
	Switch 2	2-Wire or 4-Wire function (Default Position is 2-Wire function)
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 (232/485)	
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
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 B, CE, RoHS, UL Listed, CB Scheme	
Warranty	Lifetime - Visit www.fiberopticlinc.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