



RLH Industries, Inc.

fiber**opti**clink.com

PRODUCT DATA SHEET

DS-158 2025-03-25

4 Line POTS Fiber Link System

Extend Analog Phone Over Fiber

The RLH 4 Line Plain Old Telephone Service (POTS) Fiber Link system transports four analog phone lines over fiber optic cable. This rugged system is designed to operate reliably in harsh environments over a wide temperature range.

Common applications include connecting analog phone lines over fiber for the benefit of electrical isolation, extending service over long distances, or reducing EMI/RFI in electrically noisy environments. The system is compatible with all traditional analog phone services, dial-up modems, meters, and fax machines.

A comprehensive set of LEDs on the front panel indicate the status of the power, fiber link, and phone lines. The standard system powering requirement is 12-48VDC, and a 125VDC option is available. The system also features dual redundant power inputs with a system status alarm contact relay, and comes standard with DIN clip and wall mount ears for ease of installation. This Fiber Link system is designed, engineered, and assembled in the USA, and is covered by our Lifetime Warranty.



4 Line POTS FXO Fiber Optic Converter

Features

System

- Supports Gigabit SFPs, MSA Compliant
- Supports Caller ID
- Supports Call-Forward Disconnect (Hook Flash)
- Supports Ringdown Function (FXS to FXS Hotline Phone)
- Standard 2-wire analog phone lines, dial-up modems, and fax machines

Environment

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

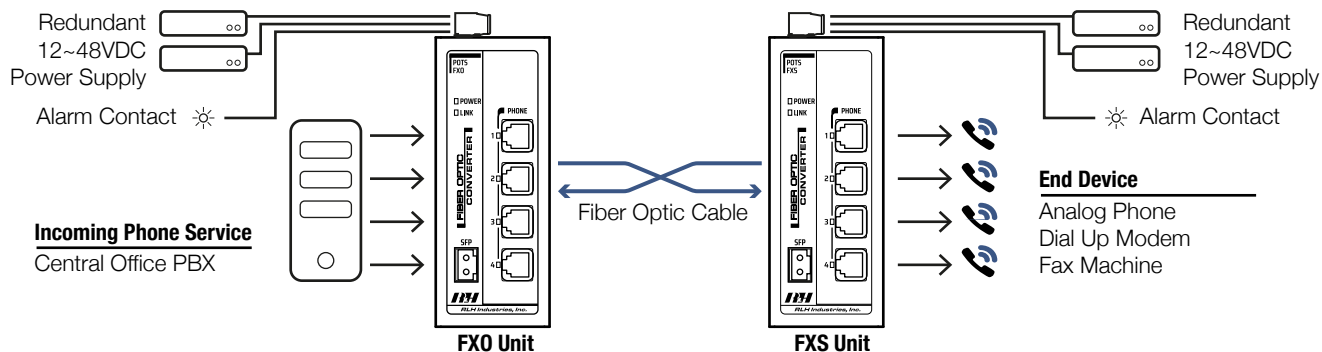
Power

- Redundant Power Inputs (12~48VDC)

Quality

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

Application





System Specifications

Fiber Port	1 Gigabit SFP Slot, Accepts MSA compliant 1.25Gbps SFPs (Sold separately)		
Phone Connectors	(4) RJ-11 Female		
Audio Bandwidth	300Hz to 3400Hz		
Analog Phone (POTS) Interface	FXO Device	Impedance	600 ohms
		Ring Frequency	Acceptable 20 ~50Hz
	FXS Device	Impedance	600 ohms
		Dial	DTMF and Pulse
		Battery Source	48VDC ± 4V
		Ring Voltage	80Vrms at 20Hz (Depending on the ringing load)
		REN	REN 3.0 (Ring Equivalence Number)
*REN value is per Line			
Ringing Waveform	Sine wave		
Ring Cadence	FXS to FXS	ON → 2 seconds, OFF → 4 seconds	
	FXO to FXS	Reproduces the cadence detected by the FXO	
Ringing Standard	Designed for use with Typical North American Telephone Networks		
Return Loss	40dB		
Supports	Caller ID, Call Forwarding & Ringdown/Hotline Service		
LED Indicators	Power, Fiber, Phone or Line 1-4		
Power Input	Standard model	12~48VDC (11~53V)	
	-A powering option	125VDC (42~160V)	
	Dual redundant power options - Polarity insensitive		
Power Consumption	≤10W		
System Alarm Relay	Normally Open / Closed Relay (SPDT)		
DC Input Isolation (in/out)	1.5KV		
Overcurrent Protection	1.0A (Automatic Recovery)		
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	Includes standard T-35 DIN rail clip and wall mount ears		
Humidity	95% non-condensing		
Safety	FCC Class B, CE, RoHS		
Warranty	Lifetime - Visit www.fiberopticlink.com for warranty information and coverage details		

Ordering Information

Description	Type	Part Number
4 Line POTS Fiber Optic Converter, FXO 1 SFP Slot, Powered by 12-48VDC	FXO	FBX-POTS-FXO-4-1
4 Line POTS Fiber Optic Converter, FXS 1 SFP Slot, Powered by 12-48VDC	FXS	FBX-POTS-FXS-4-1

- A complete system requires 2 devices of either configuration:
 - One (1) FXO device paired with one (1) FXS device for a typical phone line extension, or
 - Two (2) FXS devices paired for a ringdown hotline
- Add **-A** to the end of the part number for 125VDC input power option