

Analog Phone (POTS) DIN Fiber Link System

The RLH Plain Old Telephone Service (POTS) DIN Fiber Link system transports the analog phone line over fiber optic cable. The system will operate over a wide temperature range and has been designed to provide reliability in harsh environments.

Common applications include extending analog phone (POTS) over fiber for the benefit of electrical isolation, to achieve long distances, or through noisy environments to reduce EMI. The system is compatible with all traditional analog phone services, dial-up modems, meters, and fax machines.

A comprehensive set of LED's on the front panel indicate the status of the power, fiber, and phone line. The standard system powering requirement is 24-48VDC, with an optional 125VDC available. This rugged system also features dual redundant power inputs with a system alarm contact relay, and comes standard with DIN clip and wall mount ears. RLH Fiber Link systems are designed and Made in the USA, and are covered by our Limited Lifetime warranty.



Analog Phone (POTS) DIN Fiber Link System

Key Features

Environment

Hardened to operate in -40°C to +70°C environment

Power

Redundant power capable, 24-56VDC or 125VDC depending on model

Application

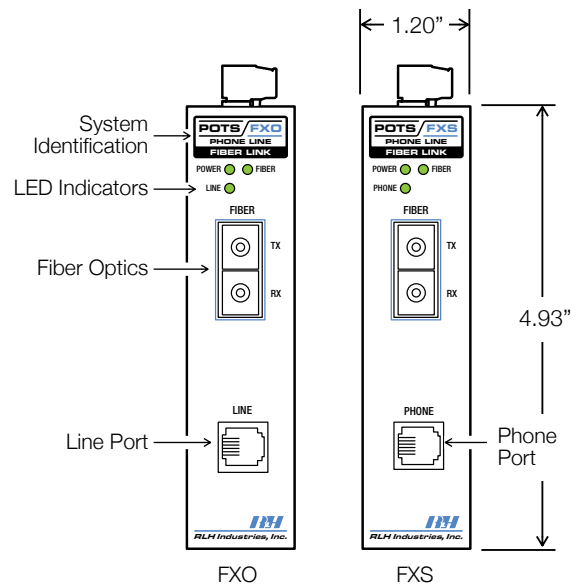
Available with ST or SC connectors for single-mode or multimode fiber
Supports Caller ID
Supports Call-Forward Disconnect (Hook Flash)
Ringdown Function (FXS to FXS Hotline Phone)

Compatibility

Standard 2 wire analog phone lines, dial-up modems, and fax machines

Quality

Made in the USA and covered by our Limited Lifetime Warranty



Feature & Dimensional Information

General Specifications

Fiber Connector Options	ST or SC		
Wavelength	Multimode	1310nm	
	Single-mode	1310nm/1550nm	
Maximum Fiber Attenuation / Distance*	Dual Fiber	Multimode (50/125µm & 62.5/125µm):	1.25mi./2 km range
		Single-mode (9/125µm):	12.4 mi./20km range
			37 mi./60km range
	Single Fiber, Bi-directional	Single-mode (9/125µm):	74 mi./120km range
			12.4 mi./20km range
			37 mi./60km range
<i>*Note: Distances equated using industry standard fiber and connector attenuation. Fiber condition, splices and connectors may affect actual range.</i>			
Phone Connectors	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 channel.
Ringling Waveform	Sine wave		
Ring Cadence	FXS to FXS	On → 2 sec, Off → 4 sec	
	FXO to FXS	Reproduces the cadence detected by FXO	
Return Loss	40dB		
Supports	Caller ID & Call Forward Disconnect		
LED Indicators	Power, Fiber, Phone or Line (See <i>User Guide</i> for more details)		
Power Input	24~48VDC or 125VDC nominal (Depending on model) Dual redundant power inputs		
Power Consumption	FXO Device	2.5 Watts	
	FXS Device	5 Watts	
System Alarm Output	Normally Open / Closed Relay		
DC Input Isolation (In/Out)	1.5KV		
Voltage Reversal Protection	Will operate with V+ or V- in either power terminal		
Over Current Protection	1.0A (Automatic Recovery)		
Temperature	Storage	-40°C to +85°C (-40°F to +185°F)	
	Operating	-40°C to +70°C	
Dimensions	H 4.93" x W 1.20" x D 3.93" (not including DIN clip)		
Mounting	Includes standard T-35 DIN rail clip and wall mount ears		
Humidity	95% non-condensing		
Warranty	Limited Lifetime	Visit www.fiberopticlink.com for warranty details	

Ordering Information

Each Analog Phone Fiber Link device is identified with a part number.

Optics	Distance	Fiber	Side	Type	Part Number
Multimode SC	2.4km / 1.5 mi.	62.5/50µm	-	FXO	PD-1FXO-03-1
				FXS	PD-1FXS-03-1
Multimode ST	2.4km / 1.5 mi.	62.5/50µm	-	FXO	PD-1FXO-04-1
				FXS	PD-1FXS-04-1
Single-mode SC (Single Fiber)	20km / 12.4 mi.	8-9µm	A	FXO	PD-1FXO-10-1
			B	FXS	PD-1FXS-11-1
	60km / 37 mi.	8-9µm	A	FXO	PD-1FXO-14-1
			B	FXS	PD-1FXS-15-1
Single-mode SC	20km / 12.4 mi.	8-9µm	-	FXO	PD-1FXO-40-1
				FXS	PD-1FXS-40-1
	60km / 37 mi.	8-9µm	-	FXO	PD-1FXO-41-1
				FXS	PD-1FXS-41-1
	120km / 74 mi.	8-9µm	-	FXO	PD-1FXO-45-1
				FXS	PD-1FXS-45-1
Single-mode ST	20km / 12.4 mi.	8-9µm	-	FXO	PD-1FXO-50-1
				FXS	PD-1FXS-50-1
	60km / 37 mi.	8-9µm	-	FXO	PD-1FXO-51-1
				FXS	PD-1FXS-51-1
	120km / 74 mi.	8-9µm	-	FXO	PD-1FXO-55-1
				FXS	PD-1FXS-55-1

- ▶ 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.
- ▶ Bi-directional single fiber models require an **A** Side and **B** Side unit for a complete system.
- ▶ Add **-A** to the end of the part number for 125VDC input power option.
- ▶ Please contact your RLH sales representative for pricing and delivery information.



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Specifications subject to change without notice.