

## 4 Channel POTS Fiber Link Card System

The 4 Channel POTS (Plain Old Telephone Service) Fiber Link Cards are fully featured and hardened for substation and critical applications. These cards operate over a wide temperature range and have been designed to provide reliability in harsh environments.

Common applications include extending analog lines over fiber for the benefit of electrical isolation, to achieve long distances, or through noisy environments to reduce EMI. These cards are fully compatible with all traditional POTS services, dial-up modems, meters, & fax machines. Fiber Link Cards are designed and Made in the USA, and are covered by our Limited Lifetime warranty.



4 Channel POTS Fiber Link Card

### Key Features

#### Environment

Operating temperature range is -40°F to +158°F (-40°C to +70°C)  
Critical, high voltage, remote or un-manned locations operating 24/7/365

#### Power

Uses 24~48VDC local power

#### Application

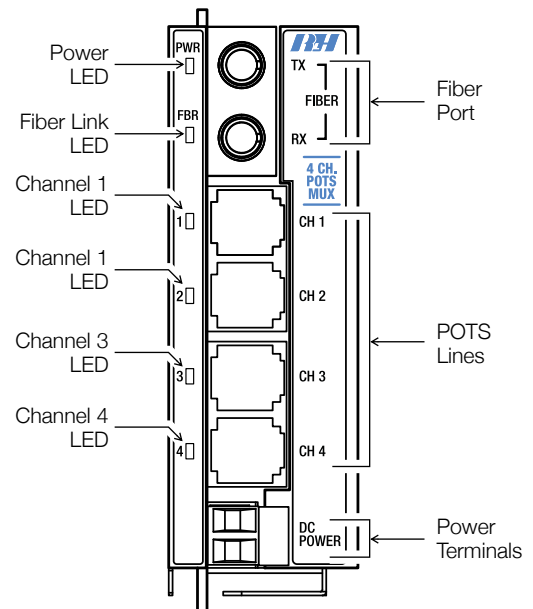
Available with ST or SC connectors for single or multi-mode fiber  
Single or dual fiber models available  
Supports Caller ID  
Supports Call-Forward Disconnect  
Ringdown Function (FXS to FXS Hotline Phone)  
Convenient LED status indicators  
Extend telephone up to 120km over fiber

#### Compatibility

Extend Plain Old Telephone Systems (POTS)  
Extend service provider 2 wire analog lines  
Dial-up modems, meters, and fax machines

#### Quality

Made in the USA covered by our Limited Lifetime Warranty



FXO/FXS Card

#### Front Panel Features

# General Specifications

<b>Transmission method</b>	Frequency modulated light via optical fiber		
	<b>Multimode</b>	1310nm	
	<b>Single-mode</b>	1310nm/1550nm	
<b>Maximum Fiber</b>	<b>Dual Fiber</b>	Multimode (50/125µm, 62.5/125µm):	1.25mi./2 km range
<b>Attenuation / Distance*</b>		Single-mode (9/125µm):	12.4 mi./20km range
			37 mi./60km range
			74 mi./120km range
	<b>Single Fiber,</b>	Single-mode (9/125µm):	12.4 mi./20km range
	<b>Bi-directional</b>		37 mi./60km range
	<b>*Note:</b> Distances equated using industry standard fiber and connector attenuation. Fiber condition, splices and connectors may affect actual range.		
<b>Fiber Type</b>	(ST or SC connectors) Multimode: 50/125µm, 62.5/125µm, Single-mode: 8-9/125µm		
<b>Phone Connectors</b>	(4) RJ-11 Female		
<b>Audio Bandwidth</b>	300Hz to 3400Hz		
<b>Analog Phone (POTS)</b>	<b>FXO Card</b>	Impedance	600 ohms
<b>Interface</b>		Ring Frequency	Acceptable 20 ~50Hz
	<b>FXS Card</b>	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.
<b>Ringing Waveform</b>	Sine wave		
<b>Ring Cadence</b>	FXS to FXS	On → 2 sec, Off → 4 sec	
	FXO to FXS	Reproduces the cadence detected by FXO	
<b>Return Loss</b>	40dB		
<b>Supports</b>	Caller ID & Call Forward Disconnect		
<b>Power Requirements</b>	24~48VDC Nominal		
<b>Max Power Consumption</b>	≤10W		
<b>Dimensions/Mounting</b>	L 7in. x H 4in. x W 1in. (177.8mm x 101.6mm x 25.4mm)		
	Compatible with RLH Fiber Link card housings		
<b>Operating Temperature</b>	-40°F to +158°F (-40°C to +70°C)		
<b>Humidity</b>	95% non-condensing		
<b>Warranty</b>	Limited Lifetime	Visit <a href="http://www.fiberopticlink.com">www.fiberopticlink.com</a> for warranty details	

## Ordering Information

Fiber / Connector	Description	Side	Distance	Fiber	Part Number
Multimode ST	FXO Card	-	2.4km / 1.5 mi.	62.5/50µm	<b>4PC-FXO-04-2</b>
	FXS Card	-	2.4km / 1.5 mi.	62.5/50µm	<b>4PC-FXS-04-2</b>
Bi-Directional Single-mode SC	FXO Card	A	20km / 12.4 mi.	8~9µm	<b>4PC-FXO-10-2</b>
	FXS Card	B	20km / 12.4 mi.	8~9µm	<b>4PC-FXS-11-2</b>
	FXO Card	A	60km / 37 mi.	8~9µm	<b>4PC-FXO-14-2</b>
	FXS Card	B	60km / 37 mi.	8~9µm	<b>4PC-FXS-15-2</b>
Single-mode SC	FXO Card	-	20km / 12.4 mi.	8~9µm	<b>4PC-FXO-40-2</b>
	FXS Card	-	20km / 12.4 mi.	8~9µm	<b>4PC-FXS-40-2</b>
	FXO Card	-	60km / 37 mi.	8~9µm	<b>4PC-FXO-41-2</b>
	FXS Card	-	60km / 37 mi.	8~9µm	<b>4PC-FXS-41-2</b>
	FXO Card	-	120km / 74 mi.	8~9µm	<b>4PC-FXO-42-2</b>
	FXS Card	-	120 km / 74 mi.	8~9µm	<b>4PC-FXS-42-2</b>
Single-mode ST	FXO Card	-	20km / 12.4 mi.	8~9µm	<b>4PC-FXO-50-2</b>
	FXS Card	-	20km / 12.4 mi.	8~9µm	<b>4PC-FXS-50-2</b>
	FXO Card	-	60km / 37 mi.	8~9µm	<b>4PC-FXO-51-2</b>
	FXS Card	-	60km / 37 mi.	8~9µm	<b>4PC-FXS-51-2</b>
	FXO Card	-	120km / 74 mi.	8~9µm	<b>4PC-FXO-52-2</b>
	FXS Card	-	120 km / 74 mi.	8~9µm	<b>4PC-FXS-52-2</b>

- ▶ A complete system requires 2 cards.
  - One (1) **FXO** paired with one (1) **FXS** card for a typical phone line extension, or
  - Two (2) **FXS** cards paired for a ringdown hotline.
- ▶ Bi-directional single fiber models require an **A** Side and **B** Side unit for a complete system.
- ▶ Please contact your RLH sales representative for pricing and delivery information.

## Technical Support

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<b>Email:</b>	support@fiberopticlink.com
<b>24/7 technical support:</b>	Toll Free 1-855-RLH-24X7
	Toll Free 1-855-754-2497

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## Contact Information

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Specifications subject to change without notice.