



# 0~10VDC Fiber Optic Converter

## Transmit four 0~10VDC Analog Signals over Fiber with High Speed and Accuracy

The RLH 0~10VDC Fiber Optic Converter transmits 4 Analog signals over fiber cable while offering high performance with 500k samples per second, 16 bit signal resolution, and less than 0.2% source signal variance.

It is compatible with most PLC's, Sensors (2, 3, or 4 wire), and other types of equipment where a precise voltage measurement must be taken and transmitted over fiber. The system comprises of a transmitter (Analog Input) and a receiver (Analog Output).

This compact and rugged system provides convenient and easy to read LEDs, supports both single-mode and multimode fiber applications, and includes an alarm contact for monitoring system power and fiber health.

This system is engineered to operate over an extreme temperature range, providing reliability in harsh environments. It is designed, engineered, and assembled in the USA, and covered by our Lifetime Warranty.



4 Channel 0~10VDC DIN Input Unit Shown

## Features

### System

- Compatible with all MSA compliant Gigabit SFPs
- Update rate: 500K samples per second
- 16 Bit Signal Resolution
- 99.8% Accuracy or Better
- Alarm contact for system status monitoring

### Environment

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

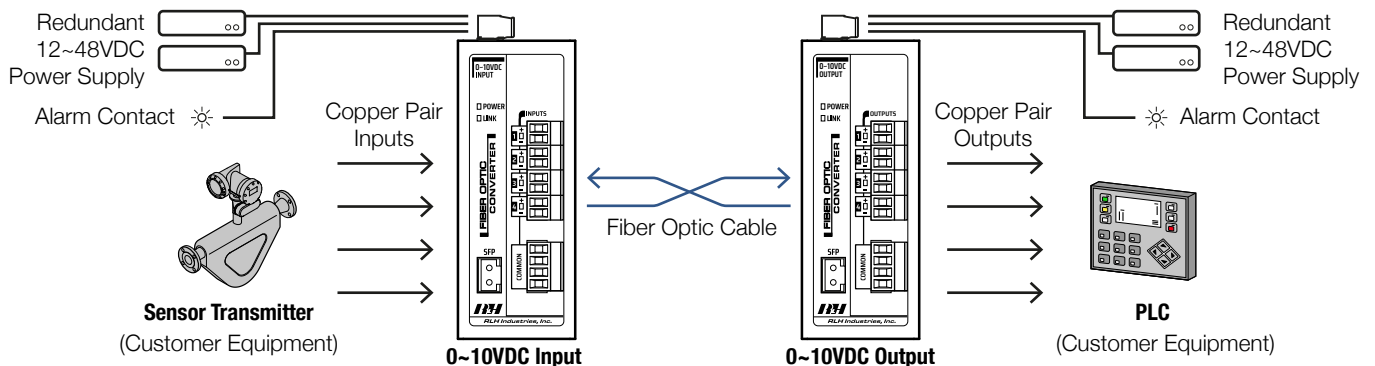
### Power

- Redundant Power Inputs (12~48VDC)

### Quality

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

## Application





## System Accuracy

<b>Accuracy</b>	99.8%
	Note: Accuracy for Fiber Link System, both Transmitter and Receiver at 25°C and powered by 24VDC
<b>Ambient Temp Effect</b>	Approximately 0.4% over range -40°F to +158°
<b>Update Rate</b>	2μs (500,000 updates per second)
<b>Signal Resolution</b>	16 Bits
<b>Sensitivity</b>	2 <sup>16</sup> (65,536) Steps

## Analog Inputs 1~4 (Single Ended)

<b>Operating Range</b>	0~10VDC
<b>Impedance</b>	200k Ohms
<b>Protection</b>	± 30V

## Analog Outputs 1~4 (single-ended, unipolar)

<b>Maximum Loop Resistance</b>	1000 Ohms
<b>Protection</b>	± 32mA

## General Specifications

<b>Fiber Port</b>	1 Gigabit SFP Slot, Accepts MSA compliant 1.25Gbps SFPs (Available separately)	
<b>LED Indicators</b>	Power, Fiber, Input/Outputs 1~4	
<b>Power Input</b>	12~48VDC (11~53V)	
	-A powering option	125VDC (42~160V)
	Dual redundant power options - Polarity insensitive	
<b>Power Consumption</b>	Input Device	5 Watts Maximum
	Output Device	8 Watts Maximum
<b>DC Input Isolation (In/Out)</b>	1.5KV	
<b>Overcurrent Protection</b>	1.0A	Automatic Recovery
<b>System Alarm</b>	Normally Open / Closed Relay	
<b>Temperature</b>	Storage	-40°C to +85°C (-40°F to +185°F)
	Operating	-40°C to +70°C (-40°F to +158°F)
<b>Dimensions</b>	2.2" (W) x 4" (D) x 5.2" (H), (56mm x 102mm x 131mm) - not including DIN clip	
<b>Mounting</b>	Includes standard T-35 DIN rail clip and wall mount ears	
<b>Humidity</b>	95% non-condensing	
<b>Safety</b>	FCC Class A, CE, RoHS	
<b>Warranty</b>	Lifetime - Visit <a href="http://www.fiberoptick.com">www.fiberoptick.com</a> for warranty information and coverage details	

## Ordering Information

Description	Part Number
0~10V Fiber Optic Converter, Input, 4 Channels, 1 SFP Slot, powered by 12~48VDC	FBX-010-INPUT-1
0~10V Fiber Optic Converter, Output, 4 Channels, 1 SFP Slot, powered by 12~48VDC	FBX-010-OUTPUT-1

- A complete system requires one (1) input device paired with one (1) output device
- Add **-A** to the end of the part number for 125VDC powering option