

10/100 Ethernet Fiber Link Card System

The RLH 10/100 Ethernet Fiber Link Card system converts a copper 10Base-T or 100Base-TX to a fiber optic 100Base-FX transmission signal of either multimode or single-mode. The cards transmit the data signals over fiber optic cable, allow for network extension over long distances, and provide electrical isolation between both ends of the network.

The Ethernet Fiber Link Card may be used as a complete system, with a card at each end, or it may be connected directly to any 100Base-FX device. The card includes Link Fault Passthrough (LFP) mode with an LED indicator for link loss failure that allows for rapid fault isolation.

This hardened, substation grade system is covered by our **Limited Lifetime Warranty**.

Key Features

Environment

Hardened to operate in -40°F to +158°F (-40°C to +70°C)

Power

local 24/48VDC power source

Application

Available with ST or SC connectors for single or multi-mode fiber
Dual and Single (bi-directional) fiber models available
RJ45 UTP port with 10/100 auto-negotiation
Link alarm function for status monitoring
Critical, high voltage, remote or un-manned locations operating 24/7/365

Compatibility

IEEE 802.3 10 Base-T UTP, 100Base-TX, and 100Base-FX Devices

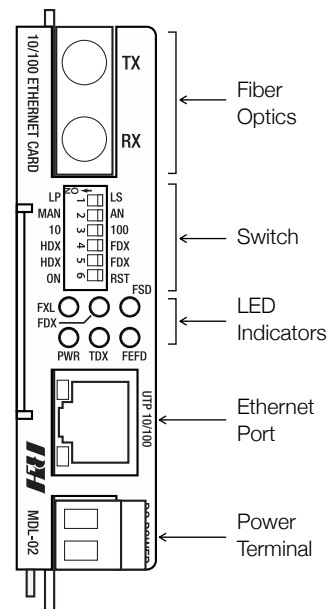
Quality

Made in the USA

Covered by our **Limited Lifetime Warranty**



10/100 Ethernet Fiber Link Card



Front Panel Features

Ordering Information

Optics	Side	Distance	Wavelength	Fiber	Part Number
Multimode ST	-	2 km/1.2 mi	1310 nm	62.5/50 µm	EF4-04-2
Bi-Directional Multimode SC	A	2 km/1.2 mi	Tx 1310 nm / Rx 1550 nm	62.5 µm	EF4-01-2
	B	2 km/1.2 mi	Tx 1550 nm / Rx 1310 nm	62.5 µm	EF4-02-2
Single-mode ST	-	20km/12.4mi.	1310 nm	8-9 µm	EF4-50-2
	-	60km / 37mi.	1310 nm	8-9 µm	EF4-51-2
	-	120km / 74 mi.	1550 nm	8-9 µm	EF4-55-2
Single-mode SC	-	20km/12.4mi.	1310 nm	8-9 µm	EF4-40-2
	-	60km / 37mi.	1310 nm	8-9 µm	EF4-41-2
	-	120km / 74 mi.	1550 nm	8-9 µm	EF4-45-2
Bi-Directional Single-mode SC	A	20km/12.4mi.	Tx 1310 nm / Rx 1550 nm	8-9 µm	EF4-10-2
	B	20km/12.4mi.	Tx 1550 nm / Rx 1310 nm	8-9 µm	EF4-11-2
	A	60km / 37mi.	Tx 1310 nm / Rx 1550 nm	8-9 µm	EF4-14-2
	B	60km / 37mi.	Tx 1550 nm / Rx 1310 nm	8-9 µm	EF4-15-2

- ▶ Optics are dual fiber unless connectors are Bi-Directional.
- ▶ Bidirectional single fiber models require both an **A** Side and **B** Side unit for a complete system.

General Specifications

Protocols	100BASE-FX, 10BASE-T, or 100BASE-TX				
Copper Connector	RJ45 UTP				
Copper Distance	100m / 328 feet				
Fiber Connector	ST or SC (Dual fiber or single fiber (bi-directional) connectors)				
Dual Fiber Optics	Fiber Type	Multimode	Single-mode		
	Wavelength TX/RX (nm)	1310	1310	1310	1550
	Distance	2km / 1.2 mi.	20km / 12 mi.	60km / 36 mi.	120km / 74 mi.
	Min. TX PWR (dBm)	-18	-15	-6	0
	Max. TX PWR (dBm)	-10	-8	-3	+5
	RX Sensitivity (dBm)	-31	-34	-34	-34
	Link Loss Budget (dBm)	13	19	28	34
Single Fiber Optics (Bi-directional)	Fiber Type	Multimode	Single-mode		
	Wavelength (nm)	1310/1550	1310/1550	1310/1550	-
	Distance	2km / 1.2 mi.	20km / 12 mi.	60km / 36 mi.	-
	Min. TX PWR (dBm)	2-17	-14	-9	-
	Max. TX PWR (dBm)	-10	-8	-5	-
	RX Sensitivity (dBm)	-31	-34	-34	-
LED Indicators	LINK/ACT	TP port link - ON: link OK, OFF: no link, Blink: activity			
	FXL (Fiber)	Fiber port link - ON: link OK, OFF: link fail, Blink: activity			
	FDX (Fiber)	Fiber port full duplex - ON: full, OFF: half, Blink: half & collisions			
	FSD	Fiber signal detect - ON: signal detected, OFF: fiber disconnected			
	FEFD	Far end fault detection - OFF: normal operation, Blinking: far end fault detected			
	TDX	TP port full duplex - ON: full, OFF: half, Blink: half & collisions			
	PWR	Power - ON: power applied, OFF: no power			
10/100	TP port speed - ON: 100m, OFF: 10M				
Power Input	24~56VDC @ 3W				
Dimensions	7"x 4"x1" (Standard RLH Fiber Link Card form factor)				
Temperature	Operating	-40°F to +158°F (-40°C to +70°C)			
	Storage	-40°F to +176°F (-40°C to +80°C)			
Humidity	5~95% non-condensing				
Warranty	Limited Lifetime	Visit www.fiberopticlink.com for warranty details			