



Gigabit Ethernet Fiber Link Card System

EG4-XX-1

The RLH Gigabit Ethernet Fiber Link Card system converts a copper 10Base-T or 100/1000Base-TX to a 1000Base-SX/LX fiber optic transmission signal of either multimode or single-mode. The cards transmit the data signals over fiber optic cable which 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 system, with a card at each end, or the fiber optic cable may be connected directly to any 1000Base-SX/LX compatible device.

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

Key Features

Environment

Hardened to operate in 32°F to +122°F (0°C to +50°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 10/100/1000 auto-negotiation
Link alarm function for status monitoring
Critical, high voltage, remote or un-manned locations operating 24/7/365

Compatibility

IEEE 802.3/AB

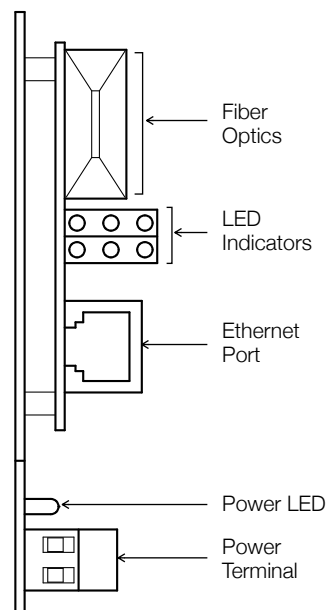
Quality

Manufactured in the USA

Covered by our **Limited Lifetime Warranty**



Gigabit Ethernet Fiber Link Card



Front Panel Features





Ordering Information

Optics	Side	Distance	Wavelength	Fiber	Part Number
Multimode ST	-	550m/1804 ft.	1310 nm	62.5/50 µm	EG4-04-1
Bi-Directional Multimode SC	A	550m/1804 ft.	Tx 1310 nm / Rx 1550 nm	62.5 µm	EG4-01-1
	B	550m/1804 ft.	Tx 1550 nm / Rx 1310 nm	62.5 µm	EG4-02-1
Single-mode ST	-	20km/12.4mi.	1310 nm	8~9 µm	EG4-50-1
	-	60km / 37mi.	1310 nm	8~9 µm	EG4-51-1
	-	100km / 62 mi.	1550 nm	8~9 µm	EG4-55-1
Single-mode SC	-	20km/12.4mi.	1310 nm	8~9 µm	EG4-40-1
	-	60km / 37mi.	1310 nm	8~9 µm	EG4-41-1
	-	100km / 62 mi.	1550 nm	8~9 µm	EG4-45-1
Bi-Directional Single-mode SC	A	20km/12.4mi.	Tx 1310 nm / Rx 1550 nm	8~9 µm	EG4-10-1
	B	20km/12.4mi.	Tx 1550 nm / Rx 1310 nm	8~9 µm	EG4-11-1
	A	60km / 37mi.	Tx 1310 nm / Rx 1550 nm	8~9 µm	EG4-14-1
	B	60km / 37mi.	Tx 1550 nm / Rx 1310 nm	8~9 µm	EG4-15-1

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

General Specifications

Protocols	1000BASE-SX/LX, 10BASE-T, or 100/1000BASE-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	550 m/1804 ft.	20km / 12 mi.	60km / 36 mi.	100km / 62 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	550 m/1804 ft.	20km / 12 mi.	60km / 36 mi.	-
	Min. TX PWR (dBm)	2-17	-14	-5	-
	Max. TX PWR (dBm)	-10	-8	-3	-
	RX Sensitivity (dBm)	-31	-34	-34	-
	Link Loss Budget (dBm)	14	20	29	-
LED Indicators	LINK/ACT	Fiber port link - Blink together:Link OK / Blink alternating: link fail			
	FX (Fiber)	Fiber signal - ON: fiber signal is OK / Blink: collisions			
	10/100/1000	TP port speed - ON: 1000m / OFF: 10/100M			
	FDX	TP port full duplex - ON: full duplex / OFF: half, Blink: collisions			
	PWR	Fiber/TP power - ON: power OK / OFF: no power			
	INPUT POWER	Card power - ON: power OK / OFF: no power			
Power Input	24~56VDC @ 3W				
Dimensions	7.0" x 4.0" x 1.0"				
Temperature	Operating	32°F to +122°F (0°C to +50°C)			
	Storage	-40°F to +194°F (-40°C to +90°C)			
Humidity	5~95% non-condensing				
Warranty	Limited Lifetime	Visit www.fiberopticlink.com for warranty details			