

4 Wire Data Fiber Link Card System

The 4 Wire Data Fiber Link Card system provides a transmission of 4 wire data over two optical fibers. The 2 wire data is half duplex, and 4 wire data is full duplex. It supports full duplex constant transmission up to 9600bps (9.6Kbps) in voice-frequency or audio-tone range (300Hz-3.4KHz). It also supports DDS data rates of 2.4Kbps and 4.8Kbps. LED indicators show fiber receive and power status.

Common applications include SCADA and protective relay systems. This hardened, rugged system may be installed into any of our card housings, and is covered by our **Limited Lifetime Warranty**.



4 Wire Data Fiber Link Card

Key Features

Environment

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

Power

Dual power capable, line or local 24/48VDC

Simplex current output option to power customer equipment (SUB side only)

Application

Available with ST or SC connectors for single or multi-mode fiber

4 Wire analog audio-tone up to 9600 baud (9.6Kbps)

Critical, high voltage, remote or un-manned locations operating 24/7/365

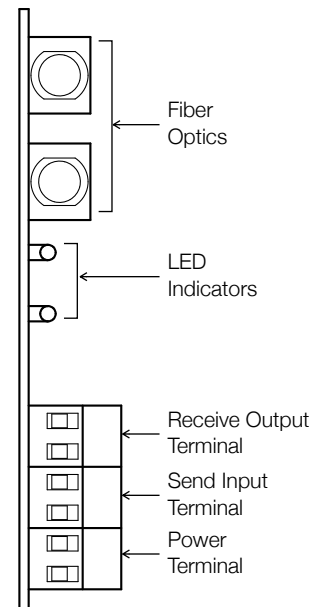
Compatibility

SCADA and Protective Relay systems

Quality

Made in the USA

Covered by our **Limited Lifetime Warranty**



CO/Sub Card

Front Panel Features

Ordering Information

Optics	Distance	Fiber	Description	Part Number	CLEI
Multimode ST	2km / 1.25 mi.	62.5 μ m	CO Card	8806-1235-03	VAUIASE9AA
			SUB Card	8806-1245-03	VAUIASB9AA
Single-mode ST	15km / 9 mi.	8~9 μ m	CO Card	8806-1279-01	NPIFCC01AA
			SUB Card	8806-1289-01	NPIFDC01AA
Single-mode SC	15km / 9 mi.	8~9 μ m	CO Card	8805-1279-01	LFT1AAMEAA
			SUB Card	8805-1289-01	LFT1AANEAA
Long Haul Single-mode ST	50 km / 31 mi.	8~9 μ m	CO Card	8806-1279-01-LH	-
			SUB Card	8806-1289-01-LH	-
Long Haul Single-mode SC	50 km / 31 mi.	8~9 μ m	CO Card	8805-1279-01-LH	-
			SUB Card	8805-1289-01-LH	-

- ▶ 62.5 μ m multimode fiber compatibility is standard, add **-50** to part number for 50 μ m fiber compatibility
- ▶ Add **-RJ** to part number for installed RJ45 adapter

General Specifications

Transmission method	Amplitude modulated light via two optical fiber Multimode: 850nm (Tx level: -26dB \pm 1dB) Single-mode: 1310nm (Tx level: -29dB \pm 1dB) SM Long Haul: 1310nm (Tx level: -6dB \pm 2dB)
Maximum Fiber Loss / Distance*	Multimode: 8dB / 1.2 miles (2km) Single-mode: 8dB / 9 miles (15km) SM Long Haul: 26dB / 31 miles (50km); minimum 8dB Note: Distances equated using industry standard fiber and connector attenuation of 3dB/Km. Fiber condition, splices and connectors may affect actual range.
Fiber Type	Multimode: 62.5/125 μ m, 50/125 μ m Single-mode: 9/125 μ m
Fiber Connector Types	ST or SC
Wire Connector	Screw clamp, 12-26 AWG
Bandwidth	300 Hz to 3.4 KHz
Channel Noise	< 20dBmC (15dBmC typical)
DC Resistance Limits	2000 Ohms typical for 50V DC CO battery
Maximum Analog Data Rate	9600 bps (9.6 Kbps)
Maximum Latency (Over Fiber System)	250 μ s
Nominal Impedance	600 Ohm input and output
Insertion Loss	0dB +/- 0.5dB each direction
Signal Input Level	+8 to -16dBm
Surge Protection	PTC thermistors, zener diodes and varistors
Power Requirements	12mA-20mA @ 24-56VDC
Powering Method	Line or Local Power
Operating Temperature	-40° to +158° F (-40° to +70° C), 95% non-condensing
Dimensions	7"x4"x1" (Standard RLH Fiber Link Card form factor)
Warranty	Limited Lifetime <i>Visit www.fiberopticalink.com for warranty details</i>