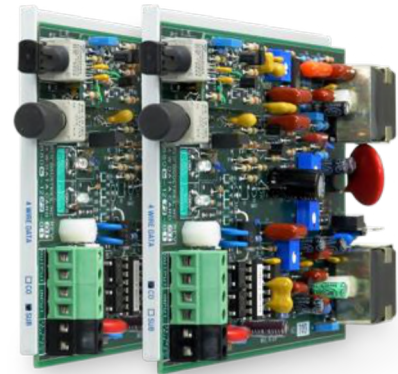


## 4 Wire Data Fiber Link Card System

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

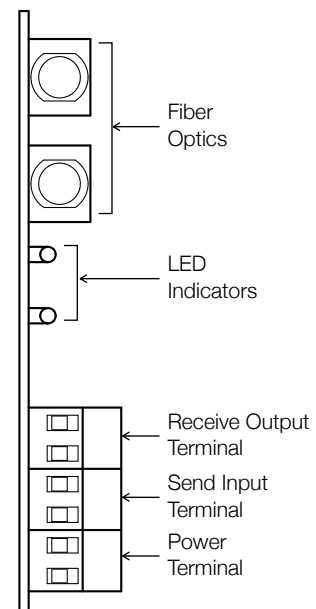
### Compatibility

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 $\mu$ m	CO Card	<b>8806-1235-03</b>	VAUIASE9AA
			SUB Card	<b>8806-1245-03</b>	VAUIASB9AA
Single-mode ST	15km / 9 mi.	8~9 $\mu$ m	CO Card	<b>8806-1279-01</b>	NPIFCC01AA
			SUB Card	<b>8806-1289-01</b>	NPIFDC01AA
Single-mode SC	15km / 9 mi.	8~9 $\mu$ m	CO Card	<b>8805-1279-01</b>	LFT1AAMEAA
			SUB Card	<b>8805-1289-01</b>	LFT1AANEAA
Long Haul Single-mode ST	50 km / 31 mi.	8~9 $\mu$ m	CO Card	<b>8806-1279-01-LH</b>	-
			SUB Card	<b>8806-1289-01-LH</b>	-
Long Haul Single-mode SC	50 km / 31 mi.	8~9 $\mu$ m	CO Card	<b>8805-1279-01-LH</b>	-
			SUB Card	<b>8805-1289-01-LH</b>	-

- ▶ 62.5 $\mu$ m multimode fiber compatibility is standard, add **-50** to part number for 50 $\mu$ m fiber compatibility
- ▶ Add **-RJ** to part number for installed RJ45 adapter
- ▶ Add **-S** to part number for simplex current output option on Sub card only.

## General Specifications

<b>Transmission method</b>	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)
<b>Maximum Fiber Loss / Distance*</b>	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.
<b>Fiber Type</b>	Multimode: 62.5/125 $\mu$ m, 50/125 $\mu$ m Single-mode: 9/125 $\mu$ m
<b>Fiber Connector Types</b>	ST or SC
<b>Wire Connector</b>	Screw clamp, 12-26 AWG
<b>Bandwidth</b>	300 Hz to 3.4 KHz
<b>Channel Noise</b>	< 20dBmC (15dBmC typical)
<b>DC Resistance Limits</b>	2000 Ohms typical for 50V DC CO battery
<b>Maximum Analog Data Rate</b>	9600 bps (9.6 Kbps)
<b>DDS Data Rate</b>	2.4 Kbps 4.8 Kbps
<b>Maximum Latency</b> (Over Fiber System)	250 $\mu$ s
<b>Nominal Impedance</b>	600 Ohm input and output
<b>Insertion Loss</b>	0dB +/- 0.5dB each direction
<b>Overload Level</b>	8dBm into 600 Ohms
<b>Surge Protection</b>	PTC thermistors, zener diodes and varistors
<b>Power Requirements</b>	12mA-20mA @ 24-56VDC
<b>Powering Method</b>	Line or Local Power
<b>Simplex Current Output Option</b>	18mA@24VDC on XMIT pairs, Sub side only
<b>Operating Temperature</b>	-40° to +158° F (-40° to +70° C), 95% non-condensing
<b>Dimensions</b>	7"x4"x1" (Standard RLH Fiber Link Card form factor)
<b>Warranty</b>	Limited Lifetime <i>Visit <a href="http://www.fiberopticlink.com">www.fiberopticlink.com</a> for warranty details</i>