

## DATA SHEET

### 2 Wire Data

#### Extend Analog Data Up To 9600bps For AC Data Transmission Services – Line or Local

The 2 Wire Data Fiber Link Card System provides 2 wire analog data service up to 9600 bps for AC data transmission services. Such services may include 2 wire on-line modems, SCADA systems, and audio-tone protective relaying systems. The 2 Wire Data system provides a constant transmission path in the VF range.

The copper signal is converted to optical, transmitted over fiber optic cable, and converted back into the original copper signal. This allows for network extension over long distances, and provides electrical isolation between both ends of the network.

The 2 Wire Data Fiber Link Card system is compatible with any RLH fiber link card housing or shelf, temperature hardened for tough environmental conditions, and is covered by our Limited Lifetime Warranty.

### Key Features

#### Environment

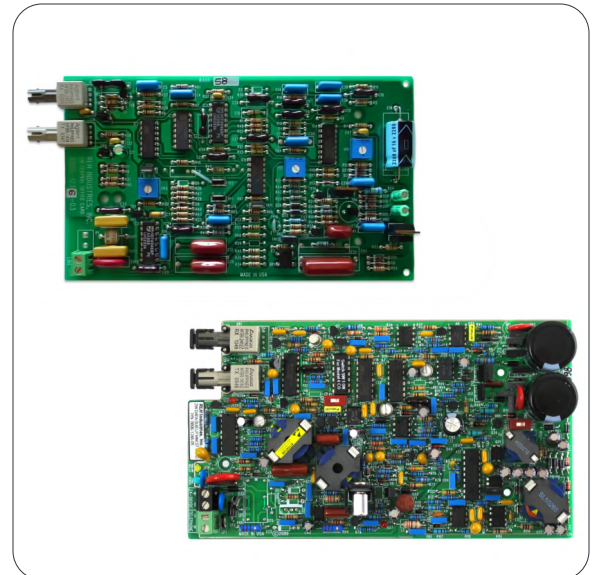
- Hardened to operate in -40°F to +158°F (-40°C to +70°C)

#### Power

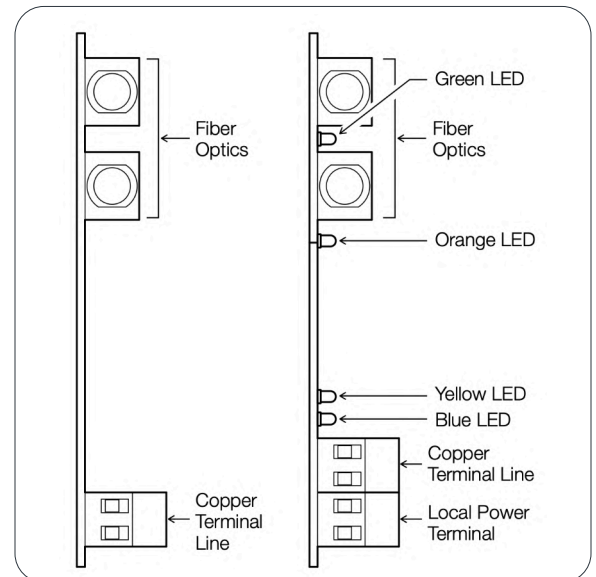
- CO Card (line powered models): Line power of 28mA maximum, minimum 18V (Tip & Ring) at the card
- CO Card (locally powered models): 24~56VDC local power
- SUB Card: 24~56VDC local power

#### Application

- Singlemode (60km/37mi.) / Multimode (2.4km/1.5mi.) fiber systems
- ST or SC fiber connector types
- Constant bi-directional transmission
- Critical, high voltage, remote or un-manned locations operating 24/7/365



CO and SUB Card System



Dimensions

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### Ordering Information

Card Type	Mode	Connector	Distance	Fibers	Part Number
CO Card (line powered)	Multimode	ST	2.4km/1.5 miles	Dual Fiber	8806-1236-02
CO Card (locally powered)	Multimode	ST	2.4km/1.5 miles	Dual Fiber	8806-1236-02LP
SUB Card (locally powered)	Multimode	ST	2.4km/1.5 miles	Dual Fiber	8806-1246-05
CO Card (line powered)	Singlemode	ST	15km/9 miles	Dual Fiber	8806-1363-01
CO Card (locally powered)	Singlemode	ST	15km/9 miles	Dual Fiber	8806-1363-01LP
SUB Card (locally powered)	Singlemode	ST	15km/9 miles	Dual Fiber	8806-1373-03
CO Card (line powered)	Singlemode	SC	15km/9 miles	Dual Fiber	8805-1363-01
CO Card (locally powered)	Singlemode	SC	15km/9 miles	Dual Fiber	8805-1363-01LP
SUB Card (locally powered)	Singlemode	SC	15km/9 miles	Dual Fiber	8805-1373-03
CO Card (line powered)	Singlemode	ST	60km/37 miles	Dual Fiber	8806-1363-01-LH
CO Card (locally powered)	Singlemode	ST	60km/37 miles	Dual Fiber	8806-1363-01LP-LH
SUB Card (locally powered)	Singlemode	ST	60km/37 miles	Dual Fiber	8806-1373-03-LH
CO Card (line powered)	Singlemode	SC	60km/37 miles	Dual Fiber	8805-1363-01-LH
CO Card (locally powered)	Singlemode	SC	60km/37 miles	Dual Fiber	8805-1363-01LP-LH
SUB Card (locally powered)	Singlemode	SC	60km/37 miles	Dual Fiber	8805-1373-03-LH

- A complete system requires a CO and a SUB card

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### Key Specifications

<b>Transmission Method:</b>	Multimode: 820nm Singlemode: 1310nm <small>*Amplitude modulated light via two optical fibers</small>
<b>Maximum Fiber Loss / Distance:</b>	Multimode: 10dB / 1.5 miles (2.4km) Singlemode: 8dB / 9 miles (15km) SM Long Haul: 26db / 37 miles (60km) <small>*Distances equated using industry standard fiber losses and connector attenuation of 3dB/km. *Fiber condition, splices and connectors will affect actual range.</small>
<b>Fiber Type:</b>	Multimode: 62.5/125 $\mu$ m, 50/125 $\mu$ m Singlemode: 8~9/125 $\mu$ m
<b>Fiber Connector Types:</b>	ST or SC
<b>Frequency Response:</b>	Terminated with 600 Ohms at 1000 Hz: 300-3400 Hz +0.5 to -2.0 dB
<b>Insertion Loss:</b>	0dB +/- 0.5dB
<b>Overload Level:</b>	+5 dBm into 600 Ohms
<b>Channel Noise:</b>	Less than 20 dBrnC (10 dBrnC typical)
<b>DC Resistance Limits:</b>	1600 Ohms loop (including CO DC feed)
<b>Maximum Data Rate:</b>	9600 bps (9.6Kbps) (analog) <small>*Using Data Compression; otherwise any AC Data that can be transmitted over POTS network cable pairs</small>
<b>Insertion Loss:</b>	0dB +/- 0.5dB each direction
<b>Powering Requirements:</b>	CO Card: Line Power: 18~54V DC, 18mA minimum, 28mA maximum Local Power: 24~56VDC 28mA maximum Sub Card: All Models: Local power, 24~56VDC 45mA
<b>Operating Temperature:</b>	-40° to +158° F (-40° to +70° C), 95% non-condensing



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rugged, fiber optic  
technology

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[www.fiberopticlink.com](http://www.fiberopticlink.com)

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