RLH Industries, Inc.

DATA SHEET

The leader in rugged fiber optic technology.

DS-025 2020-03-18

4 Wire 56k DDS Fiber Link Card System

The 4 Wire 56k DDS Fiber Link Card System processes incoming bipolar signals (3.2V P-P Max) with digital data signal rates from 4.8 to 64kbps. It also supports analog data with bandwidth of 1 to 300kHz from 19.2 to 64kbps.

Electrical signals received from the copper pairs are converted into optical signals and transmitted in both directions through fiber optic cable.The optical signals are converted back to electrical signals and transmitted to the copper pairs at the other end. The system supports remote loopback testing from the CO. This hardened, rugged system is covered by our **Limited Lifetime Warranty**.

4 Wire 56k DDS Fiber Link Card

Key Features

Environment

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

Power

CO side card is dual power capable, line or local 24/48VDC
Sub side card requires 24/48VDC

Application

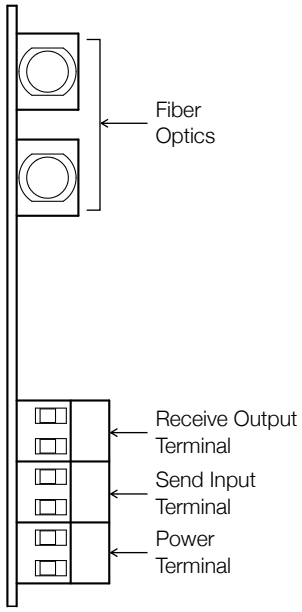
Available with ST or SC connectors for single or multi-mode fiber
4 Wire Frame Relay 64 Kbps DDS
19.2 kbps to 64 kbps data rate
1 kHz to 300 kHz bandwidth
Critical, high voltage, remote or un-manned locations operating 24/7/365

Compatibility

Adtran® Total Reach® and Westell®

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 / 1.2 mi.	62.5µm	CO Card	**8806-1314-01**	NPIFCH01AA
			SUB Card	**8806-1324-01**	NPIFDH01AA
Single-mode ST	15km / 9 mi.	8~9µm	CO Card	**8806-1318-01**	NPIFCE01AA
			SUB Card	**8806-1328-01**	NPIFDE01AA
Single-mode SC	15km / 9 mi.	8~9µm	CO Card	**8805-1318-01**	LFT1AAKEAA
			SUB Card	**8805-1328-01**	LFT1AALEAA
Long Haul Single-mode ST	50 km / 31 mi.	8~9µm	CO Card	**8806-1318-01-LH**	NPIFCE01AA
			SUB Card	**8806-1328-01-LH**	NPIFDE01AA
Long Haul Single-mode SC	50 km / 31 mi.	8~9µm	CO Card	**8805-1318-01-LH**	LFT1AAKEAA
			SUB Card	**8805-1328-01-LH**	LFT1AALEAA

▶ Please contact your RLH sales representative for pricing and availability

General Specifications

Transmission method	Frequency modulated light via two optical fibers		
	Multimode	850nm	Tx level: -26dB +/- 1dB
	Single-mode	1310nm	Tx level: -27dB +/- 1dB
	Single-mode Long Haul	1310nm	Tx level: -12dB +/- 2dB
Maximum Fiber Loss / Distance	Multimode	8dB / 1.2 miles (2 km)	*Note: Distances equated using industry standard fiber and connector attenuation. Fiber condition, splices and connectors may affect actual range.
	Single-mode	8dB / 9 miles (15 km)	
	Single-mode Long Haul	26dB* / 31 mi. (50 km)	
Fiber Type	Multimode	62.5/125µm	
	Single-mode	8-9/125µm	
Fiber Connectors	ST or SC		
Temperature Limits	-40°F to +158°F (-40°C to +70°C)		
Humidity	95% non-condensing		
Bandwidth	1kHz to 300kHz		
Signal to Noise	>40dB for line attenuation up to 30dB at 28kHz		
Digital Data Type	Bipolar AMI digital data stream		
Data Rates	Analog	Minimum 19.2 kbps; Maximum: 64 kbps	
	DDS	4.8 kbps, 9.6 kbps, 19.2 kbps, 56 kbps, 64 kbps	
BER	$<10^{-9}$		
Transmit Level (Loss Select at position 1)	3V P-P Nominal at 20°C (68°F)		
Insertion Loss	0dB +/- 1dB in each direction		
Surge Protection	PTC thermistors, gas tube, zener diodes, and MOVs		
Power Requirements	CO Card: Span power 19-20.4VDC, 12mA minimum, 50mA maximum		
	Aux. power 24-56VDC 12mA minimum. CO Card limits current to 15mA		
	Sub Card: Aux. power 24-56VDC, 20-42mA		
Powering Method	CO Card: Line power simplexed on Send and Receive pairs, or a Local **isolated** DC power source connected to AUX. P.S. input.		
	Sub Card: Local **isolated** DC power source connected to AUX. P.S. input.		
Dimensions	Standard RLH Fiber Link Card, 7”x4”x1”		
Warranty	Limited Lifetime	*Visit* www.fiberopticlink.com *for warranty details*	