

HDSL (Universal) Fiber Link Card System

The RLH Industries, Inc. HDSL Fiber Link System® interfaces directly with a standard HDSL1, 2 or 4 copper telephone line. The HDSL CO card converts the electrical signal from the CO side HDSL copper line for transmission over fiber optic cable (multimode or single mode) to the HDSL Sub card, which then converts the fiber signal back to an electrical signal for transmission over copper lines.

This system provides a complete communications solution for HDSL over fiber. It has LED status and alarm output indicators for system monitoring, and is temperature hardened for use in extreme conditions. RLH HDSL systems are made in the USA and are covered by our **Limited Lifetime Warranty**.



HDSL (Universal) Fiber Link Card

Key Features

Environment

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

Power

CO card is typically simplex powered
Sub card uses 44-56VDC local power

Application

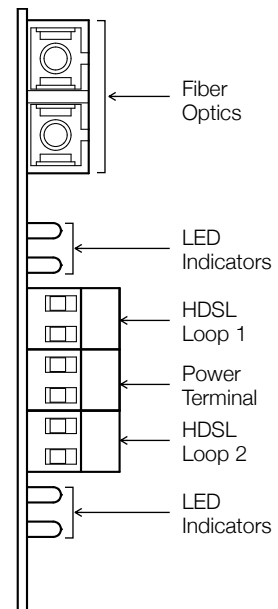
Available with ST or SC connectors for single or multi-mode fiber
Critical, high voltage, remote or un-manned locations operating 24/7/365

Compatibility

NEBS Level 3
Universal HDSL (HDSL 1, HDSL 2, or HDSL 4)

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	8806-1439-01	NPP1RM0CAA
			SUB Card	8806-1449-01	NPP1SM0CAA
Multimode SC	2km / 1.2 mi.	62.5µm	CO Card	8805-1439-01	NPIFHJ01AA
			SUB Card	8805-1449-01	NPIFJJ01AA
Single-mode ST	15km / 9 mi.	8~9µm	CO Card	8806-1459-01	NPP1RK0CAA
			SUB Card	8806-1469-01	NPP1SK0CAA
Single-mode SC	15km / 9 mi.	8~9µm	CO Card	8805-1459-01	NPIFHD01AA
			SUB Card	8805-1469-01	NPIFJD01AA

- ▶ 62.5µm multimode fiber compatibility is standard, add **-50** to part number for 50µm fiber compatibility
- ▶ To add RJ-45 copper input instead of screw-down input, add **-RJ** at the end of the UHDSL card part number.
- ▶ Example part number: **8806-1439-01-RJ** =HDSL CO Multimode w/ ST fiber connectors and RJ-45

General Specifications

Transmission method	Serial Bit Stream via two optical fibers
	Multimode 1310nm
	Single-mode 1310nm
Maximum Fiber Loss / Distance*	Multimode 12dB / 1640 feet (500m)
	Single-mode 17dB / 8 miles (13km)
Fiber Type	Multimode 62.5/125µm, 50/125µm
	Single-mode 9/125µm
Fiber Connector Types	ST or SC
Maximum Copper Length	8kft of 26AWG, 12kft of 24AWG Cable (Between HDSL-1, 2 or 4 CO Line or Repeater card and RLH CO HDSL Card)
HDSL Signal Format	Full duplex 2B1Q or TC-PAM w/Spectral Shaping
End-to-End Sync	Typically 30 seconds additional for HDSL system to train.
Maximum Data Rate	3.152 Mbps
BER	<10 ⁻⁸
Transmit Level	Equal to opposite end receive level +/- 1.5dB (Dip switch SW1 position 4A)
Surge Protection	PTC thermistors, Surgectors™ and varistors
Power Methods	CO Card Typical HDSL line powering 85-210VDC. Sub Card 44-56VDC, local power over 8kft of 26AWG or 12kft of 24AWG Cable
Powering Requirements	5.5 Watts Maximum
Operating Temperature	-40° to +160° F (-40° to +70° C)
Humidity	5-95% non-condensing
Dimensions	7"x4"x1" (Standard RLH Fiber Link Card form factor)
Warranty	Limited Lifetime Visit www.fiberopticlink.com for warranty details