



RLH Industries, Inc.

## DATA SHEET

The leader in  
rugged fiber optic  
technology.

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# Single Channel T1 Fiber Link Card System

The Single Channel T1 Fiber Link Card converts electrical/copper T1(DS1) signals and transport them over optical fiber. The system can operate from T1 span power (60mA) or local 24/48VDC power. It has LED status and alarm output indicators for system monitoring, and is temperature hardened for use in extreme conditions.

All of the products in the RLH T1 Fiber Link family are designed for the utmost quality and reliability. Typical applications include high voltage GPR isolation, utility, wireless backhaul, and military communications. RLH single channel T1 systems are made in the USA and are covered by our **Limited Lifetime Warranty**.



Single Channel T1 Fiber Link Card

## Key Features

### Environment

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

### Power

Simplex 60mA line powering, eliminating costly external powering  
Dual power capable, line or local 24/48VDC

### Application

Single-mode (60km/37mi.) / Multimode (2km/1.2mi.) fiber systems  
ST or SC fiber connector types  
Loopback testing  
NC/NO alarm contact for remote monitoring of system health  
Same unit may be used at either end of the fiber system  
Can be used within or beyond customer premise environments  
Critical, high voltage, remote or un-manned locations operating 24/7/365

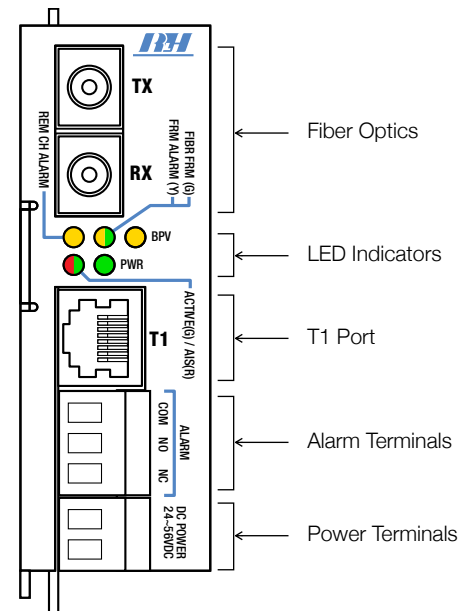
### Compatibility

B8ZS and AMI  
Plug and play into Single Channel and 2 Channel Card/DIN systems

### Quality

#### Made in the USA

Covered by our **Limited Lifetime Warranty**



CO/Sub Card

Front Panel Features

## Ordering Information

Optics	Description	Distance	Fiber	Part Number
Multimode ST	Single Channel T1 (CO/SUB)	2km/ 1.2 mi	62.5/50µm	<b>1T4-02-1</b>
Single-mode ST	Single Channel T1 (CO/SUB)	15km/ 9 mi	8~9µm	<b>1T4-20-1</b>
	Single Channel T1 (CO/SUB)	60km/ 37mi	8~9µm	<b>1T4-21-1</b>
Single-mode SC	Single Channel T1 (CO/SUB)	15km/ 9 mi	8~9µm	<b>1T4-10-1</b>
	Single Channel T1 (CO/SUB)	60km/ 37mi	8~9µm	<b>1T4-11-1</b>

- ▶ A complete system requires a card on both ends of fiber.
- ▶ Plug and play compatible with RLH Single & 2 Channel Fiber Link Card and DIN systems.
- ▶ Please contact your RLH sales representative for pricing and delivery information.

## General Specifications

<b>Transmission method</b>	Amplitude modulated light via two optical fibers	
	Multimode:	850nm (Tx level: -16dB ± 1dB)
	Single-mode:	1310nm (Tx level: -23dB ± 1dB)
	Single-mode Long Haul:	1310nm (Tx level: -8dB ± 2dB)
<b>Maximum Fiber Attenuation / Distance*</b>	Multimode:	10dB / 1.2 miles (2 km)
	Single-mode:	8dB / 9 miles (15 km)
	Single-mode Long Haul:	26dB* / 37 mi. (60 km), *min. required loss -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>	ST or SC connectors	
	Multimode:	62.5/125µm, 50/125µm
	Single-mode:	8-9/125µm
<b>Temperature Limits</b>	-40°F to +158°F (-40°C to +70°C)	
<b>Humidity</b>	95% non-condensing	
<b>Dimensions</b>	RLH Standard Fiber Link Card Form Factor L7" x W4"x H1.2"	
<b>Mounting</b>	Installed into any RLH Fiber Link Card Housing. Rack, DIN mount and wall mount housings are available.	
<b>BER</b>	<10 <sup>-9</sup>	
<b>Surge Protection</b>	Fuses, thyristors, PTC thermistors, zeners, and MOVs	
<b>Local Power Requirement</b>	24-56 VDC, 60mA	
<b>Powering Method</b>	60mA line power simplexed on Send and Receive pairs, or an isolated DC power source connected to power input terminals.	
<b>Power Connector</b>	Non-polarity sensitive local power input via removable screw down terminal block	
<b>Compatibility</b>	Compatible with Single and 2 Channel T1 Fiber Link Card and DIN systems	
<b>Warranty</b>	Limited Lifetime	Visit <a href="http://www.fiber optic link.com">www.fiber optic link.com</a> for warranty details