

Fiber Optic Link 8-Channel Contact Closure Interface System Description and Installation

Fiber Type	8-Ch Contact Closure Transmitter Card	8-Ch Contact Closure Receiver Card
Multimode ST	8806-1508-01	8806-1518-01
Multimode SC	8805-1508-01	8805-1518-01
Single-mode ST	8806-1528-01	8806-1538-01
Single-mode SC	8805-1528-01	8805-1538-0
Single-mode ST (Long Haul)	8806-1528-01LH	N/A
Single-mode SC (Long Haul)	8805-1528-01LH	N/A



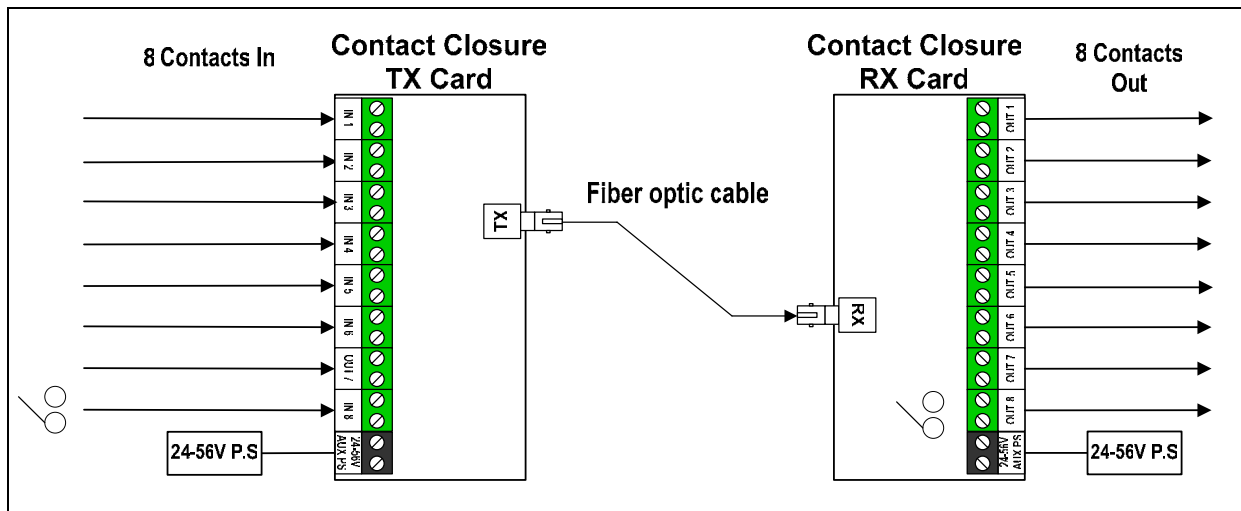
Description

The Fiber Optic Link Contact Closure system provides a transmission of up to eight independent contact closure signals over one optical fiber.

Contact Closure Transmitter Card. The Contact Closure Transmitter Card provides the electrical-to-optical interface between dry contact closure relay input and a fiber strand. The card is locally powered from a 24-56VDC source.

Note: In order to maintain high voltage isolation, Fiber Optic Link TX and RX cards must be powered from separate power sources.

Contact Closure Receiver Card. The Contact Closure Card provides the optical-to-electrical interface between a fiber strand and normally-open relay contact output. The Receiver card is locally powered by a 24-56VDC source. The Receiver Card provides LED indicators to display relay conditions, power, and fiber carrier receive.

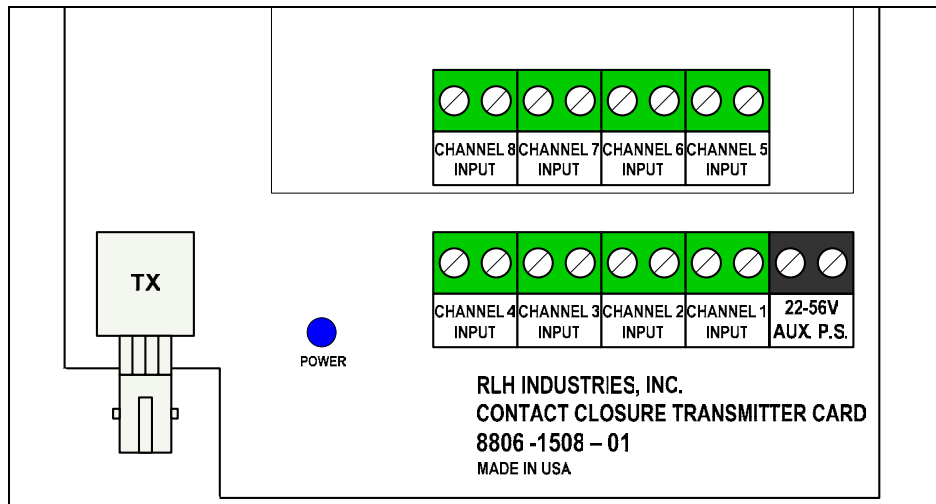


Contact Closure System Diagram

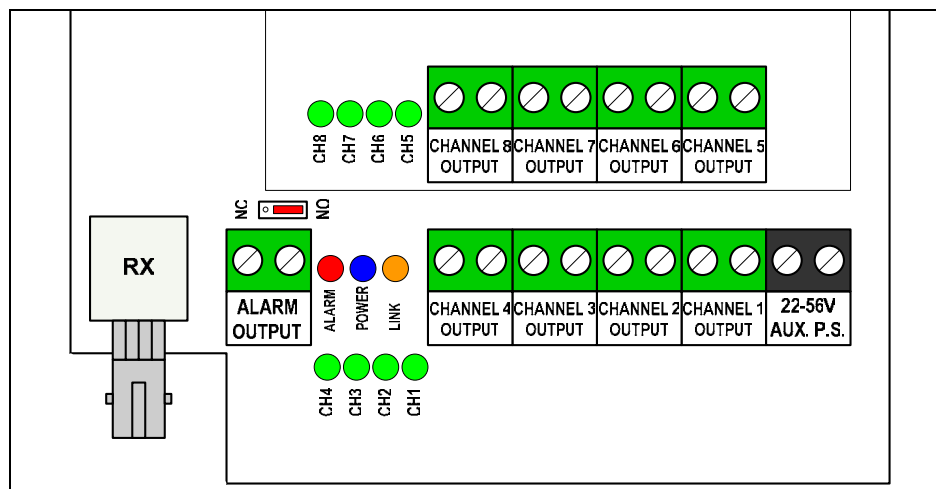
Installation

The Fiber Optic Link Contact Closure card can be installed into any RLH card housing. All electrical and fiber optic connection are made directly onto the card.

Connect fiber optic cable. Fiber Optic Link Contact Closure Cards are equipped with a optical connector. Connect fiber to the transmitter and receiver marked “TX” and “RX”. Fiber cable should always be routed loosely avoiding tight bends.



Contact Closure Transmitter Card Connectors



Contact Closure Receiver Card Connectors

Connect wire pair. The wire pair from the dry contact relay or alarm monitoring equipment connects to the green “Channel Input/Output” screw-down terminal on the Card.

Connect Power. Connect a 24-56VDC power source to the black “AUX. P.S.” screw-down terminal on the card. The power input is not polarity sensitive.

Troubleshooting

If trouble is encountered, verify all installer connections, signal and voltage levels. If trouble persists, replace the unit and retest. If technical assistance is required, contact RLH Industries, Inc. Technical support department: (714) 532-1672 (6 am to 6 pm- PST), or for after hours, weekends and holidays call (714) 366-2503 or (714) 457-5740.

Warranty Repair

RLH Industries, Inc. Fiber Optic Link products have an unconditional lifetime warranty. If a unit needs repair, call the RLH Customer Service department for a Return Material Authorization (RMA) number and return the defective unit with the RMA number, freight prepaid, along with a brief description of the problem. As specified in our warranty RLH will repair and return the unit at no charge to the customer. If an out-of-service condition exists, a replacement unit can be obtained; however, a purchase order number will be required to ensure return of the replacement unit.

Specifications

Transmission method	Amplitude modulated light via two optical fibers Multimode: 850nm Single-mode: 1310nm SM Long Haul: 1310nm
Maximum Fiber Loss / Distance ¹	Multimode: 6dB / 0.6 miles (1km) Single-mode: 10dB / 6 miles (10km) SM Long Haul: 26dB* / 37 miles (60km) ; *8dB minimum 1. Distance is equated using industry standard fiber and connector attenuation.
Fiber Type	Multimode: 62.5/125µm, 50/125µm ; Single-mode: 8-9/125µm
Fiber Connector Types	ST or SC
Wire Connector	Screw clamp, 16-26 AWG
Input 1-8 (TX Card)	Dry contact closure relay
Output 1-8 (RX Card)	Normally Open Relay
Alarm Output (RX Card)	Normally Open / Closed Relay
Response Time	2 msec
Relay Maximum Rating	150V AC or DC, 2A, 60W
Surge Protection	PTC thermistors, zener diodes and varistors
Power Requirements	TX Card: 24-56VDC, 12mA minimum RX Card: 24-56VDC, 200mA maximum
Powering Method	Local DC
Operating Temperature	-40° to +158° F (-40° to +70° C), 95% non-condensing
Dimensions	7"x4"x1"