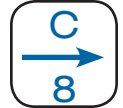




8-channel optically isolated contact closure transmitter



Description

The ComNet™ FDC8ISOT 8-Channel Contact Closure Transmitter unit provides up to eight independent normally-open (NO) dry contact closures over one multimode or single-mode optical fiber, when used in conjunction with the companion ComNet model FDC8NLR Non-Latching Receiver or FDC8R Latching Receiver units. Each of the contact closure inputs are optically isolated at 1500V to ground, for those applications where high stray or transient voltages may exist. Microprocessor-based logic in the FDC8ISOT Transmitter detects a customer-furnished switch or contact closure, and encodes the closure into robust data packets that are mapped and transmitted to the FDC8NLR Receiver. Packets received with excessive bit errors will not result in random changes in the receiver relay contact resting or actuated states, making this system ideal for mission-critical remote switching applications. These transmitter modules incorporate status indicating LEDs for rapidly providing a local indication of each contact closure channel and operating power. Packaged in the exclusive ComNet ComFit housing, these units may be either shelf or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 Adaptor Plate Kit. Industrially hardened and rated for operation from -40 to +75 degrees C, the FDC8ISOT may be deployed in virtually any unconditioned out-of-plant or trackside/roadside environment, and voltage transient protection is provided across the operating voltage input rail. Plug-and-play design ensures ease of installation and operation, and no optical or electrical adjustments are ever required.

Applications

- Remote control of mission-critical vital trackside relaying or roadside signaling equipment
- Remote operation of lane, gate, or door operators or controllers
- Building HVAC, industrial control, and SCADA networks
- Non-latching fire and intrusion alarm systems
- Non-latching triggered alarm & PIR (Passive Infrared) detection systems
- Latching Relay output applications

Features

- Transmits up to eight contact closures over one optical fiber
- Eight channel Point-to-Point architecture
- Optically isolated inputs rated at 1500 V to ground
- Power and eight individual contact closure channel status LED indicators
- Tested and certified by an independent laboratory for full compliance with the environmental requirements (ambient operating temperature, mechanical shock, vibration, humidity with condensation, high-line/low-line voltage conditions and transient voltage protection) of NEMA TS-1/TS-2 and the Caltrans Specification for Traffic Signal Control Equipment.
- Microprocessor-based logic eliminates random contact closure status in electrically noisy environments.
- Automatic resettable solid-state current limiters
- Hot-swappable rack modules
- Interchangeable between stand-alone or rack mount use – ComFit
- Lifetime Warranty



specifications

CONTACTS

Input Channels: 8
 Input Contacts: Open: 0 mA_{DC}
 Closed: 3mA_{DC}
 Voltage Input Range: +5 – +15 V_{DC}
 Response Time: 25 msec maximum
 Optical Isolation Rating: 1500 V to ground

CONNECTORS

Contacts: Terminal Block
 FDC8ISOT(M)(S)1: ST Optical Connectors

LED INDICATORS

- Power
- Contact Closure Channel Status

ELECTRICAL & MECHANICAL

Power: 8-15 VDC @ 150 mA
 Surface Mount: From Rack
 Rack: 1
 Number of Rack Slots: 1
 Current Protection: Automatic Resettable Solid-State Current Limiters Meets IPC Standard
 Circuit Board: 6.1 × 5.3 × 1.1 in., (15.5 × 13.5 × 2.8 cm)
 Size (in./cm) (L×W×H)
 Surface Mount:
 Shipping Weight: <2 lb./0.9 kg

ENVIRONMENTAL

MTBF: >100,000 hours
 Operating Temp: -40° C to +75° C
 Storage Temp: -40° C to +85° C
 Relative Humidity: 0% to 95% (non-condensing)*

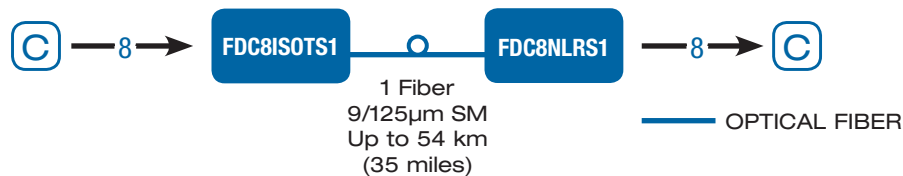
* May be extended to condensation conditions by adding suffix 'C' to model number for conformal coating.



PART NUMBER	DESCRIPTION	FIBERS REQUIRED	FIBER	OPTICAL PWR BUDGET	MAX. DISTANCE†	# RACK SLOTS
FDC8ISOTM1	8-Channel Contact Closure Transmitter	1	Multimode 62.5/125µm	16 dB	16 km (10 miles)	1
FDC8NLRM1	8-Channel Contact Closure Non-Latching Receiver					
FDC8RM1	8-Channel Latching Contact Closure Receiver					
FDC8ISOTS1	8-Channel Contact Closure Transmitter	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
FDC8NLR1	8-Channel Contact Closure Non-Latching Receiver					
FDC8RS1	8-Channel Latching Contact Closure Receiver					
Accessories	9 Volt DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory)					
	DIN-Rail Mounting Adaptor Plate Kit – With mounting hardware (Optional, order model DINBKT1)					

† Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels. Distance can also be limited by fiber bandwidth.

Complies with FDA Performance Standard for Laser Products, Title 21, Code of Federal Regulations, Subchapter J
 In a continuing effort to improve and advance technology, product specifications are subject to change without notice.



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