



INCLUDED



HARDENED



8



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. Plug-and-play design ensures ease of installation and operation, and no optical or electrical adjustments are ever required.

## 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
- › Designed to meet 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.
- › Ambient operating temperature range: -40° C to +75° C for deployment in virtually any unconditioned out-of-plant or roadside environment
- › Status indicating LEDs provide rapid indication of critical operating parameters
- › Hot-swappable rack modules
- › Interchangeable between stand-alone or rack mount use - ComFit
- › May be DIN-rail mounted by the addition of ComNet DIN-Rail adaptor plate (Model DINBKT1 or DINBKT4, sold separately)
- › Lifetime Warranty

## 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

SPECIFICATIONS

Contacts

Input Channels	8
Input Contacts	Open: 0 mADC Closed: 3mADC Voltage Input Range: +5 - +15 VDC
Response Time	25 msec maximum
Optical Isolation Rating	1500 V to ground

Connectors

Contacts	Terminal Block
Optical	ST Connectors

LED Indicators

Power
Contact Closure
Channel Status

Power

Operating Voltage Range	8 to 15 VDC
Power Consumption	3 W
Rack Power	Supplied From Rack

Electrical & Mechanical

Number of Rack Slots	1
Current Protection	Automatic Resettable Solid-State Current Limiters
Circuit Board:	Meets IPC Standard
Size	6.1 × 5.3 × 1.1 in (15.5 × 13.5 × 2.8 cm)
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) <sup>1</sup>



ORDERING INFORMATION

Part Number	Description	Fibers Required	Fiber	Optical PWR Budget	Maximum Distance <sup>2</sup>	# 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	1	Multimode 62.5/125µm	16 dB	16 km (10 miles)	1
FDC8RM1	8-Channel Latching Contact Closure Receiver		Multimode 62.5/125µm	16 dB	16 km (10 miles)	1
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	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
FDC8RS1	8-Channel Latching Contact Closure Receiver	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	[1] Add 'C' for Conformally Coated Circuit Boards (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - With mounting hardware (Optional, order model DINBKT1 or DINBKT4)					

[2] 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.

TYPICAL APPLICATION

