



The ComNet™ FDC8 Series contact closure transmitter and receiver provides transmission of up to eight independent contact closures over one RS232 link or optical fiber. Microprocessor-based logic sends the contact information in packets that are ordered and encoded, ensuring extremely robust transmission. Packets that are garbled, packets out of sequence, and transmission bit errors will not cause random changes of state on the contact relays. Also, the mechanical latching relays maintain their state even when the unit loses power. Each module incorporates power and individual status indicating LEDs for monitoring confirmation of contact closure of each of the eight channels. Packaged in the exclusive ComNet ComFit housing, these units may be either wall or rack-mounted, or may be DIN-rail mounted by the addition of ComNet model DINBKT1 or DINBKT4 adaptor plate.

## FEATURES

- › Transmits up to eight contact closures over one RS232 link, or one optical fiber
- › Eight channel Point-to-Point transmission architecture
- › Indicating LEDs for monitoring power and contact channels
- › Eight SPST latching relays (with individual 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 and latching relays in receiver unit eliminate random contact closure status in the event of loss of link or loss of prime operating power.
- › Relay contact rating: 30 VDC, 1 Amp, normally open
- › Automatic resettable solid-state current limiters
- › Hot-swappable rack modules
- › Interchangeable between stand-alone or rack mount use - ComFit
- › Lifetime Warranty

## APPLICATIONS

- › Alarm Event Triggering
- › Building Automation and Environmental Control Systems
- › Fire and Alarm Systems
- › Lane/Gate Control
- › PIR Signal Transmission

SPECIFICATIONS

Contacts

Input/Output Channels	8
Input Contacts	5 VDC, 0.5 mA, normally open
Output Contacts	30 VDC, 1 Amp, normally open
Response Time	25 msec maximum

Connectors

FDC8T/R232, Contacts	Terminal Block
FDC8T/R(M)(S)1	ST Optical Connectors

LED Indicators

- > Power
- > Channel Status
- > Link (receiver only)

Power

Operating Voltage Range	8 to 15 VDC (or from C1 Rack, sold separately)
Power Consumption	3 W Max
Rack	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	Max. Distance †	# Rack Slots
FDC8TM1	8-Channel Contact Closure Transmitter	1	Multimode‡	16 dB	16 km (10 miles)	1
FDC8RM1	8-Channel Contact Closure Receiver		62.5/125µm or 50/125µm			
FDC8TS1	8-Channel Contact Closure Transmitter	1	Single Mode	23 dB	69 km (43 miles)	1
FDC8RS1	8-Channel Contact Closure Receiver		9/125µm			
Accessories	DC Plug-in Power Supply, 90-264 VAC, 50/60 Hz (Included)					
Options	[1] Add 'C' for Conformally Coated Circuit Boards to extend to condensation conditions (Extra charge, consult factory) DIN-Rail Mounting Adaptor Plate Kit - With mounting hardware (Optional, order model DINBKT1 or DINBKT4)					

† 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. ‡ For 50/125µm fiber, subtract 4 dB from the optical power budget.

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

Part Number	Media Required
FDC8T232	RS232 LINK
FDC8R232	RS232 LINK

