

8-channel contact closure transmitter and receiver



Description

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 LED's 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 adaptor plate.

Applications

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

Features

- Transmits up to eight contact closures over one RS232 link, or one optical fiber
- Eight channel Point-to-Point transmission architecture
- Power and eight individual channel status LED indicators
- 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



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)

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:	
Size (in./cm) (L×W×H)	
Surface Mount:	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)*

* 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
FDC8T(M)1	8-Channel Contact Closure Transmitter	1	Multimode‡ 62.5/125µm or 50/125µm	16 dB	16 km (10 miles)	1
FDC8R(M)1	8-Channel Contact Closure Receiver					
FDC8T(S)1	8-Channel Contact Closure Transmitter	1	Single Mode 9/125µm	23 dB	69 km (43 miles)	1
FDC8R(S)1	8-Channel 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. ‡ 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.

PART NUMBER	MEDIA REQUIRED
FDC8T232	RS232 LINK
FDC8R232	RS232 LINK

