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
FDC8 SERIES

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
- 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)

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Fibers Required</th>
<th>Fiber</th>
<th>Optical PWR Budget</th>
<th>Max. Distance †</th>
<th># Rack Slots</th>
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<tbody>
<tr>
<td>FDC8T1M</td>
<td>8-Channel Contact Closure Transmitter</td>
<td>1</td>
<td>Multimode‡</td>
<td>16 dB</td>
<td>16 km (10 miles)</td>
<td>1</td>
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<tr>
<td>FDC8R8M</td>
<td>8-Channel Contact Closure Receiver</td>
<td>1</td>
<td>62.5/125µm or 50/125µm</td>
<td>16 km (10 miles)</td>
<td>16 km (10 miles)</td>
<td>1</td>
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<tr>
<td>FDC8T51</td>
<td>8-Channel Contact Closure Transmitter</td>
<td>1</td>
<td>Single Mode 9/125µm</td>
<td>23 dB</td>
<td>69 km (43 miles)</td>
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<tr>
<td>FDC8R51</td>
<td>8-Channel Contact Closure Receiver</td>
<td>1</td>
<td>Single Mode 9/125µm</td>
<td>23 dB</td>
<td>69 km (43 miles)</td>
<td>1</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Media Required</th>
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</thead>
<tbody>
<tr>
<td>FDC8T232</td>
<td>RS232 LINK</td>
</tr>
<tr>
<td>FDC8R232</td>
<td>RS232 LINK</td>
</tr>
</tbody>
</table>

1 Fiber
9/125µm SM
Up to 54 km
(35 miles)

OPTICAL FIBER
RS232 LINK

OR
1 RS232 Link