

# Fiber Optic Contact Closure Transmission 8-Channel Simplex Contact Closure over Fiber

### System Design

Video



Fiber Optic Contact Closure Transmitter & Receiver VOS-8FOM-SCCT/R provides for the digital transmission of 8-Channel Simplex dry contact closure or TTL data input signal over one fiber. Applications for Alarm Event Triggering, Building Automation and Environmental Control Systems, Fire & Alarm Systems, Gate control, PIR signal Transmission, Traffic Signal Control Equipment, etc.

Stand-alone or rack-mount. All units of VOS-8FOM-SCCT/R come in an insert card version. The cards can be inserted into our our 14-slot, 19inch 4U or 6U rack-mountable card cage (VOS-CH04 or VOS-CH06). The card version of this model require two slots widths.

Audio

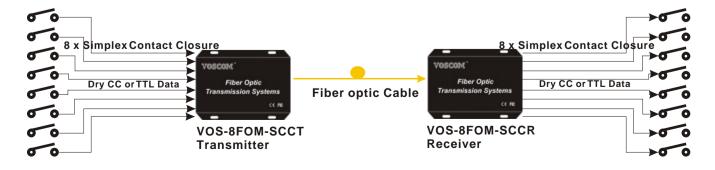
Single-Mode or Multi-Mode, VOS-8FOM-SCCT/R can support FC /PC or ST/PC Optical connector, can be used in Daisy-Chain system (Need to customize). The Transmission distance range according to the Optical Budget. Manufacturer's standard is: Single-mode 20km or Multi-mode 2km.



#### **Features**

- Support Point-to-Point or Daisy-Chain connection
- Dry Contact Closure or TTL data over one fiber
- Multi-mode Fiber Support for Distances up to 2.0 km
- Single-Mode Fiber Support for Distances up to 100 km
- LED Status Provide Rapid Indication of Operating Parameters
- No EMI or RFI and no ground loops
- · Stand alone or rack-mount
- Produce according to customer's specifications, providing OEM

## Typical Configuration







# Contact Closure over Fiber

## Ordering Information

| Model Number     |                  | Fiber Mode  | Wavelengths | Optical<br>Power | Maximum<br>Transmission |
|------------------|------------------|-------------|-------------|------------------|-------------------------|
| Transmitter      | Receiver         | TIBEL WOOL  | waverengths | Budget           | Distance                |
| VOS-8FOM-SCCMT   | VOS-8FOM-SCCMR   | Multi-Mode  | 1310nm      | 16dB             | 2km                     |
| VOS-8FOM-SCCST   | VOS-8FOM-SCCSR   | Single-Mode | 1310nm      | 12dB             | 20km                    |
| VOS-8FOM-SCCST-4 | VOS-8FOM-SCCSR-4 | Single-Mode | 1310nm      | 18dB             | 40km                    |
| VOS-8FOM-SCCST-6 | VOS-8FOM-SCCSR-6 | Single-Mode | 1550nm      | 25dB             | 60km                    |

#### Note:

- The Optical Power Budget data fit Mulit-mode (62.5/125 μm), Single-Mode (9/125 μm).
- When using 50/125 µm multimode fiber, subtract 3 dB from the optical power budget.
- Optical transmission distance is limited to optical loss of the fiber and any additional loss introduced by connectors, splices and patch panels.
- Maximum transmission distance is also limited by fiber bandwidth.
- Power adapter is manufactured by third party and is supplied with fitted screw-terminal output cables. Power adapter included (for standalone) US, European, UK or Australian power plug.
- Please feel free to consult factory for any special requirement and customization

### Specification

|   | _   |       | _ |      |    |
|---|-----|-------|---|------|----|
| • | Cor | ntact | C | losu | re |

Number of Channels: 8-Channel Simplex CC

Data Formats: Contact Closure, TTL

Data Rate: DC to 200Kbps

Response Time: 2 ms

Relay/Contact Rating: 0.5 A@ 200 VDC

Bit Error Rate: < 10E-9

#### Connectors

Contact Closure: Terminal Block

Optical: FC/PC or ST/PC Optional

Stand-Alone Power: Screw terminal block

Rack Power: AC line cord

## • Electrical & Mechanical

Input Power Requirements: DC 5V@3A

Power Adapter: AC 100V~240V

Power Consumption: < 5W

Stand-Alone Dimensions:  $176.5 \text{mm} \times 158 \text{mm} \times 59 \text{mm}$ Card for 4U Rack Dimensions:  $145 \text{mm} \times 170 \text{mm} \times 45.4 \text{mm}$ 

Shipping Weight: 2.5kg (include TX & RX)

#### Environmental

Operating Temperature:  $-45^{\circ}$  C $\sim +75^{\circ}$  C Storage Temperature:  $-45^{\circ}$  C $\sim +85^{\circ}$  C

Relative Humidity: 0%~95% (non-condensing)

MTBF: >100,000 hours

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