

# INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS

# **OSD159 DUPLEX 8-CHANNEL ALARM INTERFACE**

### **APPLICATIONS**

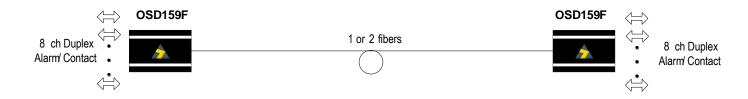
- ▲ Security monitoring or access control systems
- ▲ Simple remote control systems
- ▲ Transmission of open/closed contacts

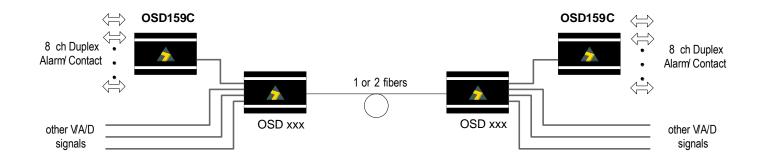
# SCC 8 C

### **FEATURES AND BENEFITS**

- ▲ Enables up to 8 duplex alarm conditions to be transferred via one RS232/TTL data channel
- ▲ Both card or standalone module versions are available
- Available as either a fiber optic modem or as an RS232 based copper modem
- RS232 version can work with any OSD fiber optic modem which has at least one spare data transmission channel
- ▲ Complete end-to-end isolation either as a fiber optic unit or as an RS232 link working in conjunction with other OSD fiber modems
- ▲ Small, robust and reliable
- ▲ Optionally available with inverting input, ie a voltage of between 5 and 24V on the input causes a closed contact at the corresponding output whereas a grounded or open input results in an open output. This is Option INV

## TYPICAL APPLICATION DESIGN





### **ORDERING INFORMATION**

OSD159 Card Version, 1-slot RS232 Unit
Option C Standalone Module Version
Option INV Inverting Input Signal

Option F 2-Fiber Multimode Operation
Option FL 2-Fiber Singlemode Operation
Option W Single Fiber Operation

1



# **SPECIFICATIONS**

Capacity 8 duplex channels

Sampling Rate 480Hz

Copper Line Interface RS232 at 9600bps

Input Interface Buffered and protected, open/closed sensing, contact closure

from IN to GND for non-inverting mode and to input voltage or open for inverting

mode will close alarm receiver N/O.

Input Loop Resistance External closed loop,  $1000\Omega$  max.

Output Interface Optically isolated MOSFET (80mA @ 200V DC or AC with <35Ω On resistance)

Alarm Interface Connector 25 pin D female subminiature connector

**OPTIONAL FIBER VERSION** 

Optical Wavelength  $850 \pm 40$ nm for OSD159F

1310nm  $\pm$  40nm for OSD159FL

Transmitter Optical Power -15 to -12dBm into multimode fiber

-15 to -10dBm into singlemode fiber

Receiver Sensitivity <-40dBm for 1 x 10<sup>-9</sup> BER

Optical Link Budget >25dB at 850nm (>6km of multimode fiber)

>25dB at 1310nm (>20km of multimode fiber, >50km of singlemode fiber)

Receiver Saturation >-7dBm

Optical Connectors ST standard

POWER/CONNECTORS/ENVIRONMENTAL

Indicators Link Status (Green: Link OK; Red: Link Faulty)

Link Alarm MOSFET switched to GND on Pin 4 of Terminal Block when link is OK

(Rated at <1.0A @ 30VDC)

Copper Line & Alarm Connector 4 Position Terminal Block

Dimensions (mm) Small module. 110W x 104D x 25H

OR

OSD standard card, 208D x 100W x 25H

Weight 200g (module), 150g (card)

Power Requirements 8 to 40VDC or 15 to 26VAC at 3VA maximum

Power Connector 2 Position Terminal Block

Operating Temperature -20 to +75°C

Relative Humidity 0 to 95% non-condensing

Chassis Current Consumption (CCC) 0.25 Amp

Doc ID: 10215905