

INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS

OSD158T/OSD158R ALARM TRANSMISSION SYSTEM



APPLICATIONS

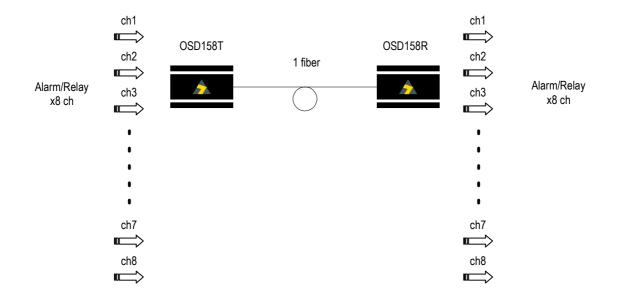
- Security and fire panel monitoring
- ▲ Simple remote control systems
- Transmission of open/closed contacts

FEATURES AND BENEFITS

- ▲ Enables up to 8 alarm conditions to be transferred several kilometres via a single optical fiber
- Immune to electrical interference
- ▲ Complete end-to-end isolation

- ▲ Safe transmission in hazardous environments
- ▲ Small, robust and reliable

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD158T Fiber Optic Alarm Transmitter Card, 8 channel OSD158R Fiber Optic Alarm Receiver Card, 8 channel

Option C Module Version

Option L 1310nm operation single mode or multimode



SPECIFICATIONS

Capacity 8 channels

Sampling Rate 6kHz

Input Interface (OSD158T transmitter)

Buffered and protected, open/closed sensing, contact closure from IN

to RTN will close alarm receiver N/O.

Input Loop Resistance External closed loop, 400 ohms max.

Each input RTN has 330 ohms internal resistance to chassis ground.

Output Interface (OSD158R receiver) Changeover contact (1Amp @ 24V DC)

Electrical Connector 25 pin D subminiature connector

Optical Wavelength 850 ± 40nm (1310nm optional with OSD158TL)

Transmitter Optical Power -17 to -14dBm into multimode fiber

-20 to -12dBm into singlemode fiber (OSD158TL only)

Receiver Sensitivity <-45dBm for 1 x 10⁻⁹ BER

Optical Link Budget >28dB at 850nm (>8km of multimode fiber)

>25dB at 1310nm (>65km of singlemode fiber)

Receiver Saturation >-11dBm

Indicators Power On

Link Fail (OSD158R only)

Optical Connectors ST standard

Dimensions (mm) Small module. 104W x 144D x 25H

OR

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

Weight 250g (module), 150g (card)

Power Requirements 9-40Vdc and 20-28Vac at 200mA maximum via 3 pin connector

Operating Temperature -20 to +75°C

Relative Humidity 0 to 95% non-condensing

Chassis Current Consumption (CCC) 0.20 Amp