OPTICAL SYSTEMS DESIGN

INDUSTRIAL & DATA TRANSCEIVERS AND MULTIPLEXERS

OSD159 DUPLEX 8-CHANNEL ALARM INTERFACE

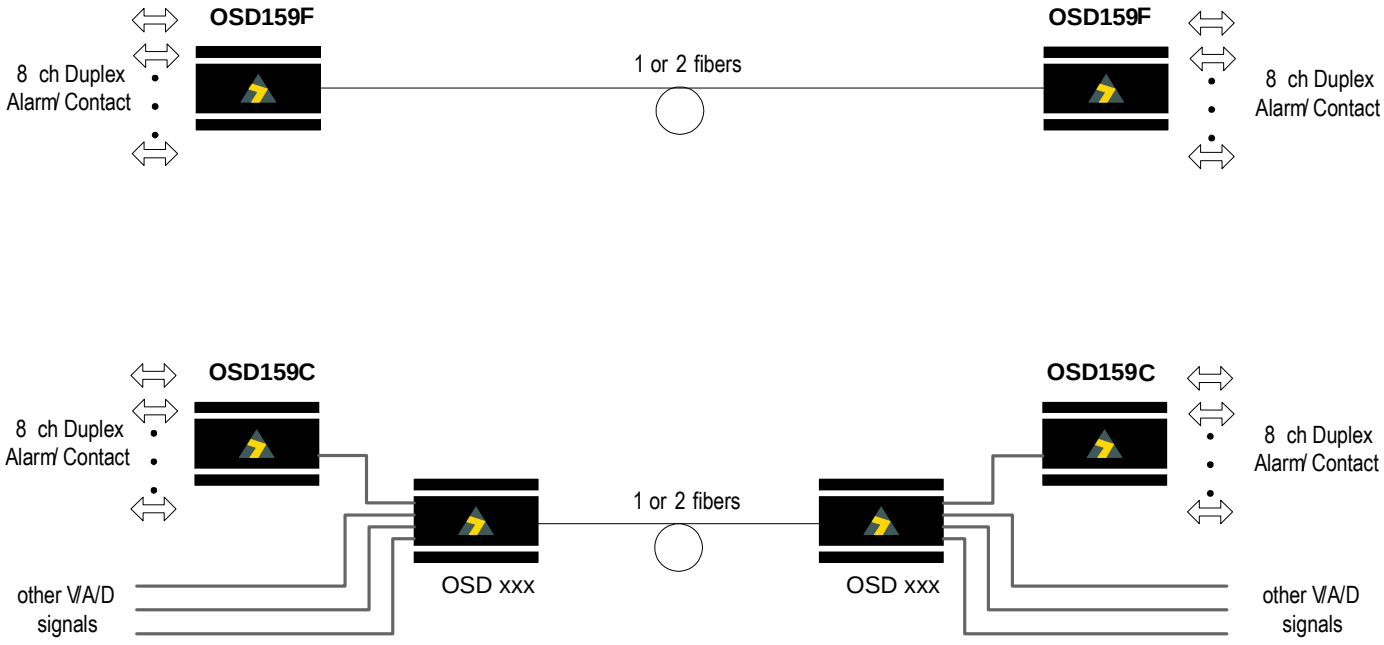
APPLICATIONS

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

FEATURES AND BENEFITS

- σ Enables up to 8 duplex alarm conditions to be transferred via one RS232/TTL data channel
- σ Both card or standalone module versions are available
- σ Available as either a fiber optic modem or as an RS232 based copper modem
- σ RS232 version can work with any OSD fiber optic modem which has at least one spare data transmission channel
- σ Complete end-to-end isolation either a a fiber optic unit or as an RS232 link working in conjunction with other OSD fiber modems

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD159	Card Version, 1-slot RS232 Unit
OSD159C	Standalone Module Version RS232 Unit

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

OPTICAL SYSTEMS DESIGN PTY LTD 7/1 Vuko Pl. Warriewood N.S.W. Australia 2102
Telephone: + 61 2 9913 8540 Fax: +61 2 9913 8735 Website: www.osd.com.au E-mail: sales@osd.com.au

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 will close alarm receiver N/O.
Input Loop Resistance	External closed loop, 1000Ω 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 ± 40nm for OSD159F 1310nm ± 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^{-9} 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 Power Connector	8 to 40VDC or 15 to 26VAC at 3VA maximum 2 Position Terminal Block
Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Chassis Current Consumption (CCC)	0.25 Amp

Specifications contained herein are correct at the time of printing. We reserve the right to alter specifications without notice.