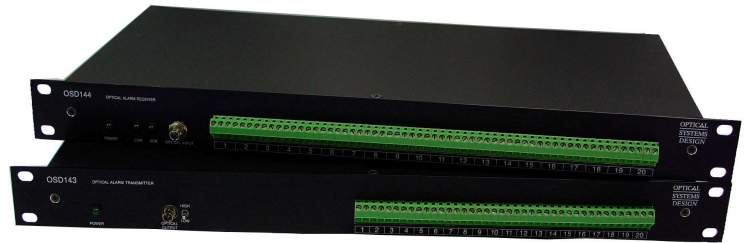




**APPLICATIONS**

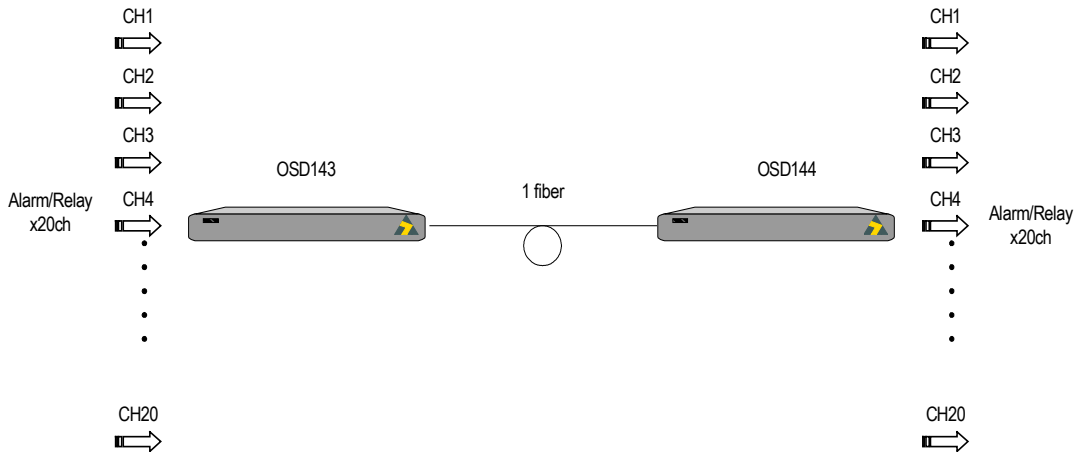
- ▲ Security monitoring
- ▲ Simple remote control systems
- ▲ Low speed data multiplexing of up to 20 channels
- ▲ Transmission of open/closed contacts



**FEATURES AND BENEFITS**

- ▲ Enables up to 20 alarm conditions to be transferred 6 kilometres via a single optical fiber
- ▲ Singlemode version is capable of greater than 30km operation
- ▲ Immune to electrical interference
- ▲ Complete end-to-end isolation
- ▲ Safe transmission in hazardous environments
- ▲ 1RU high 19" rack mounting enclosure
- ▲ Robust and very reliable

**TYPICAL APPLICATION DESIGN**



**ORDERING INFORMATION**

- OSD143      Fiber Optic Alarm Transmitter, 20 Channel
- OSD144      Fiber Optic Alarm Receiver, 20 Channel
- OSD143L     1310nm singlemode version of OSD143
- OSD144L     1310nm version of OSD144



## SPECIFICATIONS

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Capacity (alarm channels):	20 channels
Sampling Rate	25kHz
Input Interface (OSD143 Transmitter)	Buffered and protected, open/closed sensing. Contact closure from IN to RTN will activate a changeover relay contact at remote receiver.
Input Loop Resistance	External closed loop, 400 $\Omega$ max. Each input RTN has 330 $\Omega$ internal resistance to chassis ground.
Output interface (OSD144 Receiver)	Changeover contacts (1 Amp, 24V DC
Electrical Connections	Barrier terminal blocks
Optical Wavelength	850 $\pm$ 40nm (1310nm for OSD143L and OSD144L)
Transmitter Optical Power	-16 to -13dBm into 62.5/125um multimode fiber -20 to -13dBm into 10/125um singlemode fiber (OSD143L only)
Receiver Sensitivity	<-38dBm for 1 x 10 <sup>-9</sup> BER
Optical Link Budget	>22dB at 850nm (>6km of multimode fiber) >18dB at 1310nm (>40km of singlemode fiber)
Receiver Saturation	>-13dBm
Indicators	Power On Link Fail (OSD144 only)
Optical Connectors	ST standard
Dimensions (mm)	19" rack mounting, 430W x 240D x 44H (OSD143, OSD144)
Weight	2.0kg
Power Requirements	100 - 130VAC <b>or</b> 200 - 260VAC (45-65Hz) at 15VA maximum (transmitter) and at 30VA maximum (receiver).
Operating Temperature	0 to +60°C
Relative Humidity	0 to 95% non-condensing