

APPLICATIONS

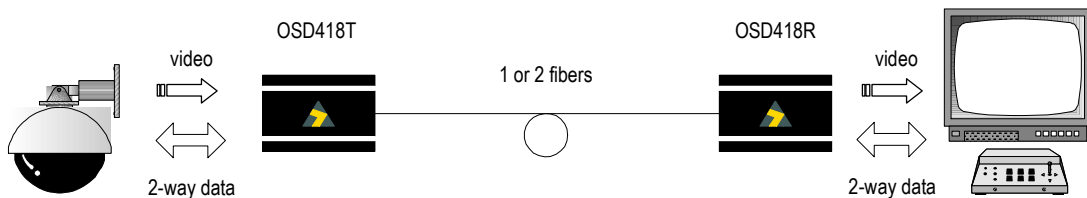
- ▲ CCTV networks requiring half or full duplex data transmission between cameras and their control centre



FEATURES AND BENEFITS

- ▲ Fiber optic transmission of video plus data signals from a CCTV camera and of data signals to the camera.
- ▲ Remote control of Pan, Tilt and Zoom for video surveillance.
- ▲ Transmission of alarm and control signals from the camera site.
- ▲ Optional contact closure termination in lieu of data signalling.
- ▲ Video bandwidth of 10MHz
- ▲ Operating range of at least 5km on multimode and 50km on singlemode fiber with standard devices and greater than 100km with optional lasers.
- ▲ Immunity to electrical interference, low radiation with complete end-to-end isolation.
- ▲ Safe transmission in hazardous environments.

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD418AT	Video transmitter with full duplex data	Option L	1310nm operation singlemode or multimode
OSD418AR	Video receiver with full duplex data	Option W	Single fiber operation
OSD418BT	Video transmitter with data to Camera	Option LD1	-10dBm 1310nm laser
OSD418BR	Video receiver with data to camera	Option LD2	-5dBm 1310nm laser
Option C	Module version	Option R	Relay output



SPECIFICATIONS

ELECTRICAL

Video Input/Output Impedance	75Ω
Video Input/Output Level	1Vpp nominal
Video Connector	BNC
Video Bandwidth	5Hz to 10MHz (+1,-3dB)
Weighted Signal to Noise Ratio	>60dB at -25dBm received optical power >50dB at -30dBm received optical power
Data Interface	TTL, RS232, RS422 and RS485 (Relay contact optional) 31kHz Manchester or Biphase possible in both directions
Data Rate	DC to >64kbps in both directions
Data Connector	15 pin female subminiature D connector

OPTICAL

Transmitter Wavelength	850 ± 30nm (1310nm for OSD418TL and OSD418RL)
Receiver Operating Wavelength	800 to 900nm (1270 to 1580nm for OSD418TL and OSD418RL)
OSD418T Transmitter Coupled Power	-15 to -10dBm into multimode fiber (OSD418T) -13 to -11dBm into singlemode fiber (OSD418TL only)
OSD418T Sensitivity for 1 x 10 ⁻⁹ BER	<-37dBm
OSD418R Transmitter Coupled Power	-20 to -10dBm into multimode fiber (OSD418R) -20 to -11dBm into singlemode fiber (OSD418RL only)
OSD418R Receiver Sensitivity	<-30dBm for >50dB video SNR
OSD418R Receiver Saturation	>-12dBm
Transmission Distance	>5km for multimode, >50km for singlemode
Optical Connectors	ST standard, others optional

PHYSICAL

	OSD418T	OSD418R
Dimensions of Module (mm)	104W x 144D x 25H	
Weight of Module	400g	
Dimensions of Card (mm)	25W x 208D x 100H	
Weight of Card	200g	
Power Requirements	+10V to 35V DC or 22 to 28VAC @ 2.5VA	
Operating Temperature	-20 to +75°C	
Relative Humidity	0 to 95% non-condensing	
Indicators	Laser OK Tx Video Present Tx/Rx Data Present Rx Optical Signal OK	Laser OK Rx Video Present Tx/Rx Data Present Rx Optical Signal OK
Chassis Current Consumption (CCC)	0.20 Amp	0.20 Amp

PIN CONFIGURATION

Pin No	Function	Pin No	Function
1,4,10,12,15	Ground	5	Data input + or contact input
9	Not Used	13	Data input -
2	Not Used	14	Data output + or relay n.o. contact
3	Not Used	7	Data output - or relay n.c. contact
11	Not Used	8	RS232 data output
6	Relay common		

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