

**OSD818T/OSD818R DIGITAL
VIDEO + DATA TRANSCEIVER PAIR**

APPLICATIONS

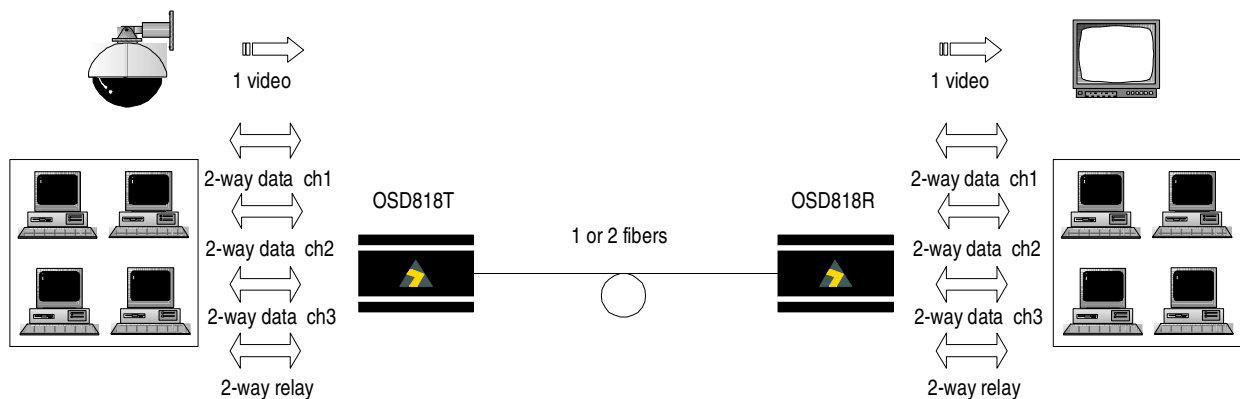
- ▲ High quality CCTV networks requiring full duplex data transmission between cameras and their control centre
- ▲ Transportation communications systems



FEATURES AND BENEFITS

- ▲ One way optic transmission of PAL, NTSC or SECAM video plus full duplex transmission of
 - three data channels
 - one relay contact channel
- ▲ Studio quality 10 bit video maintained over all link lengths
- ▲ Remote control of Pan, Tilt and Zoom for video surveillance.
- ▲ Video bandwidth of 10MHz
- ▲ Transmission of alarm and control signals from the camera site.
- ▲ Operating range of at least 3km on multimode and 100km on singlemode fiber, depending on optical devices.
- ▲ Video inputs have 3dB overload capability and can be equalised for up to 300m of coaxial cable.

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD818AT	Video transmitter with 3 duplex data channels	Option C	Module version
OSD818AR	Video receiver with 3 duplex data channels	Option L	1310nm operation singlemode or multimode
OSD818BT	Video transmitter with data to camera	Option LDN	1310nm and 1550nm lasers: contact factory
OSD818BR	Video receiver with data to camera	Option W	Single fiber operation



SPECIFICATIONS

ELECTRICAL

Video Input/Output Impedance	75Ω
Video Input/Output Level	1Vpp nominal
Video Connector	BNC
Video Bandwidth	5Hz to 10MHz ±1dB
Video Distortion	<0.5% DG, <0.5°DP
Weighted Video Signal to Noise Ratio	>67dB at all receive levels over full dynamic range
Data Interface	TTL, RS232, RS422 and RS485 31kHz Manchester or Biphase possible in either direction
Data Rate	DC to >400kbps DC to >100bps on relay channel
Data Connector	26 pin female subminiature high density D connector

OPTICAL

Transmitter Wavelength	850nm (1310nm for OSD818TL or OSD818RL options)
OSD818T Transmitter Coupled Power	-15 to -5dBm into multimode fiber >15 to -3dBm into singlemode fiber (OSD818TL version only)
OSD818R Transmitter Coupled Power	-20 to -14dBm into multimode fiber -20 to -10dBm into singlemode fiber (OSD818RL version only)
OSD818R Receiver Sensitivity	<-29dBm
OSD818R Receiver Saturation	>-3dBm
OSD818T Sensitivity	<-37dBm
OSD818T Receiver Saturation	>-10dBm
Link Distances	>2km multimode for standard 850nm OSD818 link (fiber bandwidth limited) >3km multimode for optional 1310nm OSD818L link (fiber bandwidth limited) >30km singlemode for optional 1310nm OSD818L link (fiber loss limited)
Optical Connectors	ST standard, others optional

PHYSICAL

	OSD818T	OSD818R
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 24VDC @ 5VA	
Operating Temperature	-20 to 75°C	
Relative Humidity	0 to 95% non-condensing	
Indicators	Laser OK	Laser OK
	Tx Video Present	Rx Video Present
	Data Present	Data Present
	Optical Signal OK	Optical Signal OK
Chassis Current Consumption (CCC)	0.40 Amp	0.40 Amp

DB26 CONNECTOR PIN CONFIGURATION

FUNCTION	PIN	FUNCTION	PIN	FUNCTION	PIN
Data ground	1,6	Data2 input+	20	RS232 output	13
Data1 input+	10	Data2 input-	3	Relay input	22
Data1 input-	19	Data2 output+	12	Relay n.o. output	5
Data1 output+	2	Data2 output-	21	Relay n.c. output	14
Data1 output-	11	RS232 input	4	Relay output common	23