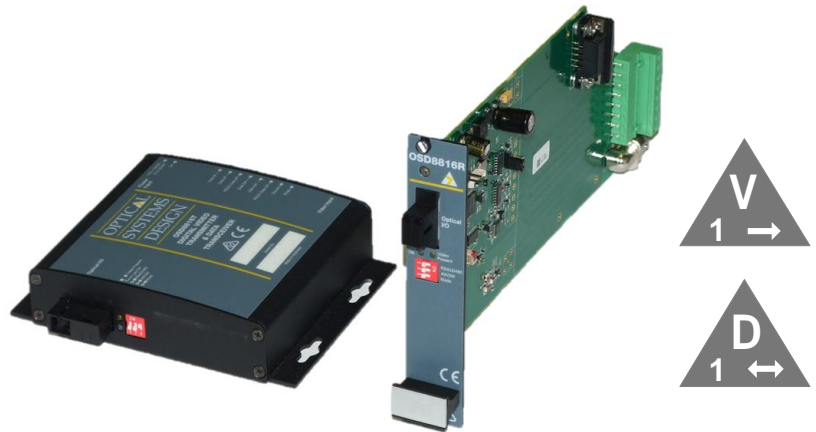


APPLICATIONS

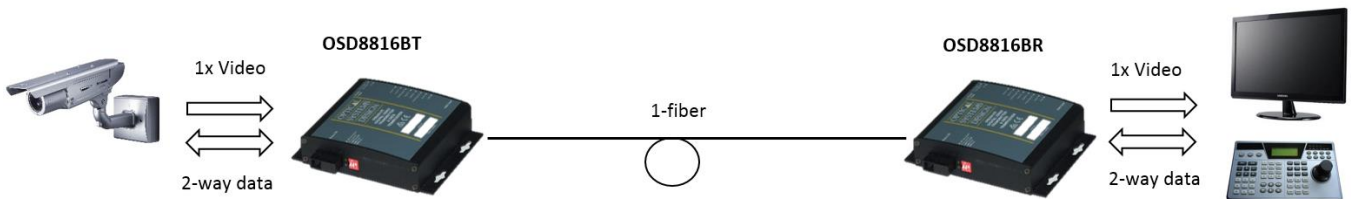
- ▲ High quality CCTV networks requiring full duplex or reverse data transmission between cameras and their control centre
- ▲ Transportation communications systems



FEATURES AND BENEFITS

- ▲ One way optic transmission of PAL, NTSC or SECAM video plus either both way or reverse transmission of one data channel
- ▲ Broadcast quality 10 bit video maintained over all link lengths
- ▲ Video bandwidth of 10MHz
- ▲ Single fiber operation
- ▲ Remote control of Pan, Tilt and Zoom for video surveillance.
- ▲ Transmission of alarm or control signal from the camera site.
- ▲ Operates over singlemode or multimode fiber.
- ▲ Operating range of up to 3km on multimode and 80km on singlemode fiber, depending on optical devices.

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

- OSD8816BT Video transmitter card with 1 duplex data channel
- OSD8816BR Video receiver card with 1 duplex data channel
- Option R Contact transmission from OSD8816BT to OSD8816BR
- Option C Module version



SPECIFICATIONS

ELECTRICAL

Video Input/Output Impedance	75Ω
Video Input/Output Level	1Vpp nominal
Video Connector	BNC
Video Bandwidth	5Hz to 10MHz
Video Distortion	<0.7% DG, <0.7° DP
Weighted Video Signal to Noise Ratio	>67dB for 10-bit operation
(at all receive levels over full dynamic range)	>64dB for 9-bit operation
Data Interface	TTL, RS232, RS422 and RS485
Optional contact transmission (from OSD8816BT to OSD8816BR only)	31kHz Manchester or Biphasic possible in either direction optoisolated MOSFET output at OSD8816R
Data Rate	DC to >1.0Mbps
Data Connector	8 way terminal block with screw clamps

OPTICAL

Number of fibers required	One only
OSD8816BT Transmitter Wavelength	1310nm
OSD8816BT Transmitter Coupled Power	-14 to -5dBm into singlemode fiber -17 to -8dBm into multimode fiber
OSD8816BR Transmitter Wavelength	1550nm
OSD8816BR Transmitter Coupled Power	-15 to -5dBm into singlemode fiber -22 to -10dBm into multimode fiber
OSD8816BR Receiver Sensitivity	<-27dBm (singlemode fiber) <-24dBm (multimode fiber)
OSD8816BR Receiver Saturation	>-3dBm
OSD8816BT Sensitivity	<-36dBm (singlemode fiber)
OSD8816BT Sensitivity	<-28dBm (multimode fiber)
OSD8816BT Receiver Saturation	>-3dBm
Optical Link Budget and Distances	>7dB: >3km on multimode fiber @ 1310nm (fiber bandwidth limited) >13dB: >30km on singlemode fiber @ 1310nm (fiber loss limited) >30dB: >80km on singlemode fiber @ 1310nm for an OSD8816 link with high power devices (contact OSD for details)
Optical Connectors	ST standard, others optional (contact OSD for details)

PHYSICAL

	OSD8816BT	OSD8816BR
Dimensions of Module (mm)	114W x 105D x 31H	
Weight of Module	350g	
Dimensions of Card (mm)	25W x 208D x 100H	
Weight of Card	200g	
Power Requirements	+9 to 35VDC or 22 to 28VAC @ 3VA	
Power Connector	2 way terminal block with spring clamps	
Operating Temperature	-40 to +75°C	
Relative Humidity	0 to 95% non-condensing	
Indicators	Tx Video Present	Rx Video Present
	Link OK	Link OK
Chassis Current Consumption (CCC)	0.25 Amp	0.25 Amp

OSD8816PP Power Adapter

Mains input	90 to 264VAC ±15%, moulded plug
DC output	+12VDC nominal, 400mA max, One 2-pin power plug on flying lead
Dimensions (mm)	65D x 45W x 48H