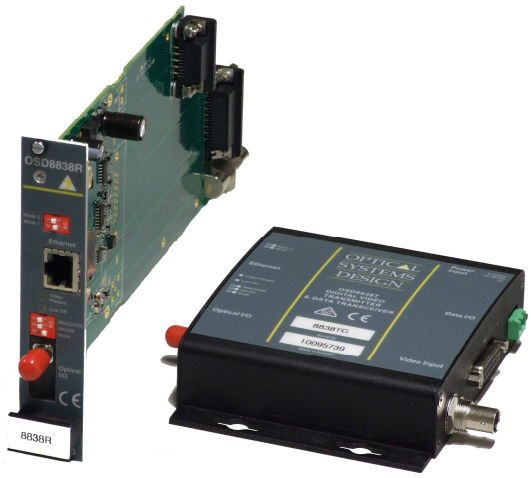
OSD8838 DIGITAL VIDEO, ETHERNET AND DATA TRANSMISSION SYSTEM



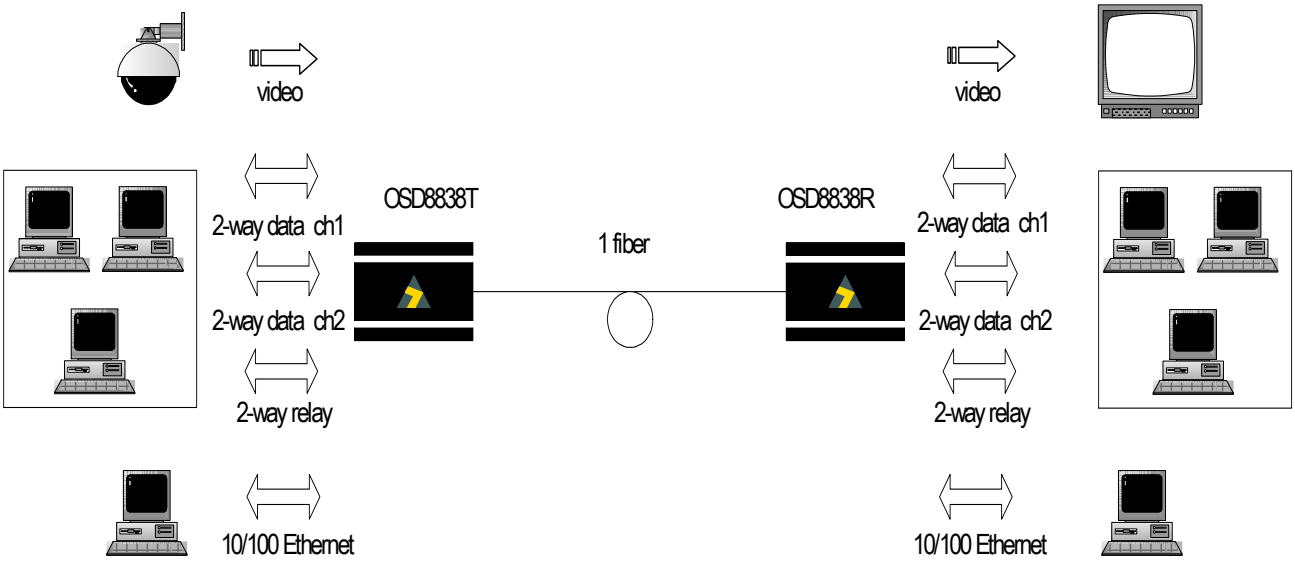
APPLICATIONS

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

FEATURES AND BENEFITS

- One way optical fiber transmission of PAL, NTSC or SECAM video plus full duplex transmission of
  - one 10/100Base-T Ethernet channel
  - two data channels
  - one relay contact channel
- Broadcast quality 9 bit video
- Remote control of Pan, Tilt and Zoom for video surveillance.
- Standard operation using multimode or singlemode fiber; no need to specify fiber type.
- Single fiber operation
- 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
- Two duplex audio channels are optionally available

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD8838T	Video transmitter with 1 Ethernet and 3 duplex data channels	Option C	Module version
OSD8838R	Video receiver with 1 Ethernet and 3 duplex data channels	Option A	Two duplex audio channels

SPECIFICATIONS

ELECTRICAL

Video Input/Output Impedance	75Ω
Video Input/Output Level	1Vpp nominal
Video Connector	BNC
Video Bandwidth	5Hz to 10MHz ±1dB
Video Distortion	<0.7% DG, <0.7° DP
Weighted Video Signal to Noise Ratio	>63dB at all receive levels over the unit's full dynamic range
Data Interface	One RS232 and one RS422 or 2-wire/4-wire RS485 31kHz Manchester or Biphase possible in either direction
Data Rate	DC to >400kbps on 2 data channels DC to >100bps on relay channel
Data Connector	15 pin female subminiature D connector
Ethernet	IEEE802.3 Ethernet standards at 10/100Mbps with Auto-Negotiation
Ethernet Link Throughput	up to 12.5Mbps
Ethernet Connector	RJ45

OPTIONAL DUPLEX AUDIO CHANNELS

Number of Channels	2 in each direction
Audio Bandwidth	10Hz to 20kHz +1,-2dB
Audio Input/Output impedance	>10KΩ/<200Ω
Audio Input Level	200mVrms nominal
Audio Output Level	200mVrms nominal
Audio Headroom	18dB
Audio Weighted Signal to Noise Ratio	>90dB at maximum level
Audio Distortion	<0.05%
Audio Connectors	3.5mm stereo socket

OPTICAL

Number of fibers required	One only
OSD8838T Transmitter Wavelength	1310nm
OSD8838T Transmitter Coupled Power	-13 to -8dBm
OSD8838R Transmitter Wavelength	1550nm
OSD8838R Transmitter Coupled Power	-15 to -9dBm
OSD8838R Receiver Sensitivity	<-27dBm
OSD8838R Receiver Saturation	>-3dBm
OSD8838T Sensitivity	<-36dBm
OSD8838T Receiver Saturation	>-10dBm
Link Distances	>3km multimode (fiber bandwidth limited) >30km singlemode (fiber loss limited) >100km singlemode with high power devices (contact OSD for details)
Optical Connector	ST standard, others optional

PHYSICAL

Dimensions of Module (mm)	114W x 105D x 31H
Weight of Module	400g
Dimensions of Card (mm)	25W x 208D x 100H
Weight of Card	200g
Power Requirements	+9 to 35VDC or 22 to 28VAC @ 4VA
Power Connector	2 way terminal block with spring clamps
Operating Temperature	-20 to +75℃
Relative Humidity	0 to 95% non-condensing
Indicators	Tx or Rx Video Present Rx Data Present Optical Signal OK Ethernet Transmit, Ethernet Link
Chassis Current Consumption (CCC)	0.30 Amp

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