

**OSD838 DIGITAL VIDEO, ETHERNET AND
DATA TRANSMISSION SYSTEM**

APPLICATIONS

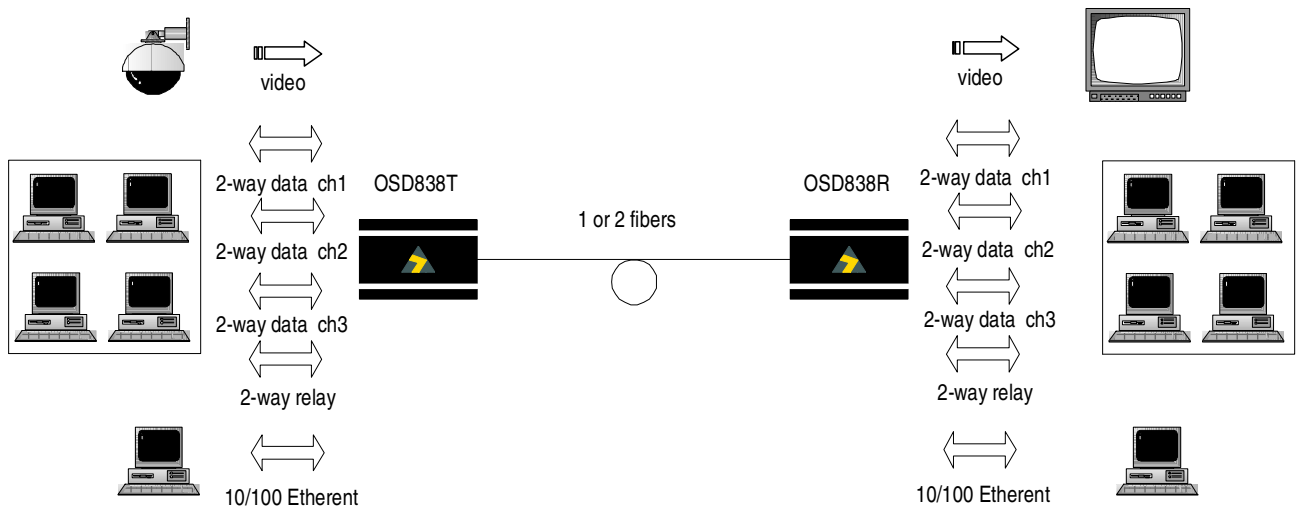
- ▲ High quality CCTV networks requiring full duplex Ethernet and/or data transmission between cameras and their control centre
- ▲ Transportation communications systems
- ▲ Broadcast television systems



FEATURES AND BENEFITS

- ▲ One way optical fiber transmission of PAL, NTSC or SECAM video plus full duplex transmission of
 - one 10/100 Base-T Ethernet channel
 - three data channels
 - one relay contact channel
- ▲ Studio quality 10 bit video
- ▲ 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 input has a 3dB overload capability and can be equalised for up to 300m of coaxial cable

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD838AT	Video transmitter with 1 Ethernet and 4duplex data channels	Option LDN	1310nm and 1550nm lasers
OSD838AR	Video receiver with 1Ethernet and 4 duplex data channels	Option W	Single fiber operation
		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 ±1dB
 Video Distortion <0.5% DG, <0.5° DP
 Weighted Video Signal to Noise Ratio >67dB at all receive levels over the unit's full dynamic range

Data Interface TTL, RS232, RS422 and RS485
 31kHz Manchester or Biphase possible in either direction
 Data Rate DC to >400kbps on 3 data channels
 DC to >100bps on relay channel
 Data Connector 26 pin female subminiature high density D connector
 Ethernet IEEE Ethernet standards at 10/100Mbps
 Ethernet Connector RJ45

OPTICAL

Transmitter Wavelength 850nm (1310nm for OSD838TL or OSD838RL options)
 OSD838T Transmitter Coupled Power -15 to -5dBm into multimode fiber
 -15 to -3dBm into singlemode fiber (OSD838TL version only)
 OSD838R Transmitter Coupled Power -20 to -14dBm into multimode fiber
 -20 to -10dBm into singlemode fiber (OSD838RL version only)
 OSD838R Receiver Sensitivity <-29dBm
 OSD838R Receiver Saturation >-3dBm
 OSD838T Sensitivity <-37dBm
 OSD838T Receiver Saturation >-10dBm

Link Distances >2km multimode for standard 850nm OSD838 link
 (fiber bandwidth limited)
 >3km multimode for optional 1310nm OSD838L link
 (fiber bandwidth limited)
 >30km singlemode for optional 1310nm OSD838L link
 (fiber loss limited)

Optical Connectors ST standard, others optional

PHYSICAL

Dimensions of Module (mm) 104W x 144D x 44H
 Weight of Module 400g
 Dimensions of Card (mm) 50W x 208D x 100H
 Weight of Card 200g
 Power Requirements +10 to 24VDC @ 4VA
 Operating Temperature -20 to 75°C
 Relative Humidity 0 to 95% non-condensing
 Indicators Laser OK
 Tx Video Present
 Rx Data Present
 Optical Signal OK
 Ethernet Transmit, Receive and Collision

Chassis Current Consumption (CCC) 0.35 Amp

DB26 CONNECTOR PIN CONFIGURATION

FUNCTION	PIN	FUNCTION	PIN	FUNCTION	PIN
Data ground	1	Data2 input+	20	Relay input	22
Not used	6,7,8,9,15,17,18,24,25,26	Data2 input-	3	Relay output n.o	5
Data1 input+	10	Data2 output+	12	Relay output n.c	14
Data1 input-	19	Data2 output-	21	Relay output common	23
Data1 output+	2				
Data1 output-	11				