

# OSD860 DIGITAL 4/8 CHANNEL VIDEO/AUDIO/DATA/ETHERNET MULTIPLEXER

## **APPLICATIONS**

- ▲ CCTV networks
- Video conferencing
- Transportation networks
- Industrial monitoring systems
- Distance learning

## **FEATURES AND BENEFITS**

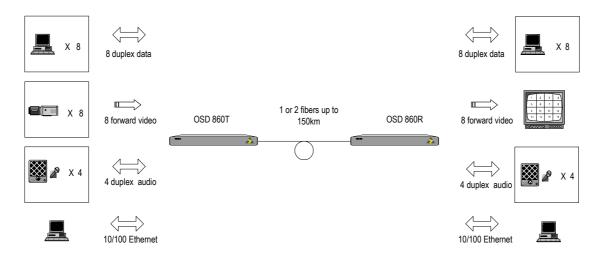
- Uncompressed 9 bit video, 24 bit audio encoding, giving professional quality transmission
- Fiber optic transmission of four or eight video signals on one fiber with four RS232 and RS422 data signals (two of each) which may be one way with the video or, optionally, full duplex
- Optional transmission of four audio and/or four additional high speed data channels which may be one way or full duplex. Alternatively, the user may transmit eight audio or eight extra data signals, again either one way or full duplex





- Range of up to 120km is possible with optional 1550nm operation
- Optional duplex operation over one fiber
- ▲ Optional 10/100 Base-T Ethernet bridging through the link
- Operates on either singlemode or multimode fiber
- ▲ Video bandwidth of 6 MHz, SNR >63dB
- ▲ Audio bandwidth of 15kHz, SNR >100dB
- Video inputs have 3dB overload capability

## TYPICAL APPLICATION DESIGN



## ORDERING INFORMATION

Contact OSD for a full listing of available options

OSD860T Transmitter Module
OSD860R Receiver Module

Option NV N video signals (N = 2, 4 or 8)

Option A Forward path audio

Option a Reverse path audio

Option DForward path data

Option d Reverse path data
Option W Single fiber operation

Option E10/100BaseT Ethernet Interface

Option NMS Network Management System



# **SPECIFICATIONS**

## **CHANNEL AVAILABILITY**

(specify at time of order)	Forward Path	Reverse Path
Number of video channels	2, 4 or 8	0
Number of data channels	4	0 or 4
Number of optional audio channels *	0, 4 or 8	0, 4 or 8
Number of optional data channels *	0, 4 or 8	0, 4 or 8
Number of optional Ethernet interface	0 or 1	0 or 1

### **ELECTRICAL**

	video	Audio
Input/Output Impedance Input/Output Level Bandwidth (±0.5dB) Signal to Noise Ratio Linearity	75Ω 1.0Vpp nominal 10Hz to 6MHz >63dB (weighted) <.7% DG <.7°DP <0.05	10KΩ/200Ω balanced/unbalanced 0dBu nominal, 15dBu maximum 10Hz to 15kHz >100dB (A weighted at max level) w total harmonic distortion

Vidoo

Audia

Standard Data Interface 2 x RS232 and 2 x RS422

Standard Data Rate DC to 150kbps

Optional Data Interface RS232 or RS422 with RS485 also available on Channel 1

Optional Data Rate DC to 400kbps

Optional Ethernet Interface 10/100BaseT via RJ45 connector with system rate of 3.5Mbps

Data Bit Error Rate <1x10<sup>-9</sup>

Video Connectors BNC

Standard Data Connector Female 15 pin D connector

Optional Audio/Data Connector Female 44 pin high density D connector

### **OPTICAL**

Transmitter wavelength Transmitter coupled power	1310nm or 1550nm (including CWDM devices from 1470 to 1610nm) Several options are available from –7dBm to +4dBm
Receiver sensitivity	<-22dBm (PIN) <-29dBm (APD)
Reverse Path Sensitivity	<-38dBm
Link budget	From 15dB to 33dB at 1310nm or 1550nm
Optical Connectors	ST standard and FC are optional

Note: Many combinations of laser types and levels and receiver types and sensitivities are possible. Contact OSD for details.

\*It is also possible to configure the unit as 8 audio, 0 data or 0 audio, 8 data.

## PHYSICAL

FITTOICAL	
Power Requirements	10 to 18VDC @ 12VA (modem case) 90 to 265 VAC @ 20VA, -48VDC power is optional (2RU enclosure)
Dimensions (mm)	100W x 208D x 50H card 105W x 210D x 55H modem case 483W x 210D x 88H 2RU enclosure
Weight	0.2kg (card), 1.0kg (modem case), 3.1kg (2RU enclosure)
Operating Temperature	-20 to +75℃
Relative Humidity	0 to 95% non-condensing

Chassis Current Cosumption 0.50 Amp for 4-channel video version

0.70 Amp for 8-channel video version

Add 0.30 Amp for additional audio, data and/or Ethernet channels

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