

**OSD880 DIGITAL 4/8 CHANNEL VIDEO/  
AUDIO/DATA MULTIPLEXER**



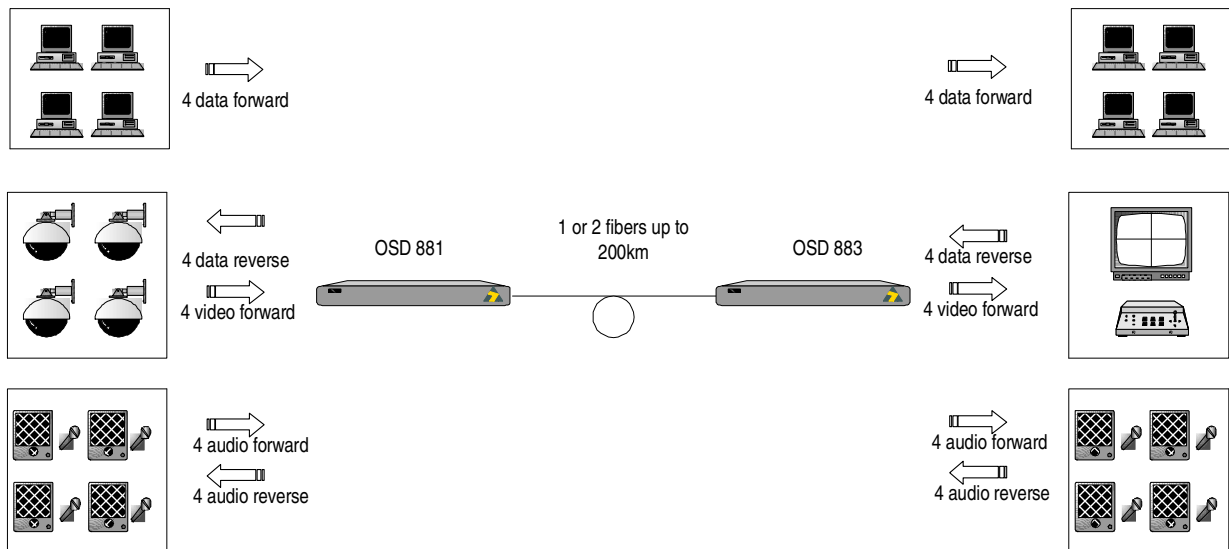
**APPLICATIONS**

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

**FEATURES AND BENEFITS**

- ▲ Uncompressed 10 bit video, 24 bit audio encoding, giving studio quality transmission
- ▲ Fiber optic transmission of one to four video signals on one fiber on one wavelength or up to eight channels per fiber using two wavelengths
- ▲ Optional transmission of four audio and/or four high speed data channels which may be one way or full duplex. Alternately, the user may transmit eight audio or eight data signals, again either one way or full duplex
- ▲ Range of up to 200km is possible with optional 1550nm operation
- ▲ Optional duplex operation over one fiber
- ▲ Operates on either singlemode or multimode fiber
- ▲ Video bandwidth of 10MHz, SNR >67dB
- ▲ Audio bandwidth of 21kHz, SNR >100dB
- ▲ Video inputs have 3dB overload capability and can be equalised for up to 300m of coaxial cable

**TYPICAL APPLICATION DESIGN**



**ORDERING INFORMATION**

Contact OSD for a full listing of available options

OSD881 Transmitter Module  
 OSD883 Receiver Module  
 Option NV N video signals (N = 1 to 8)  
 Option A Forward path audio

Option a Reverse path audio  
 Option D Forward path data  
 Option d Reverse path data  
 Option W Single fiber operation



# SPECIFICATIONS

## CHANNEL AVAILABILITY

(specify at time of order)

	<u>Forward Path</u>	<u>Reverse Path</u>
Number of Video Channels	1 to 4	0
Number of Audio Channels *	0 or 4	0 or 4
Number of Data Channels *	0 or 4	0 or 4

## ELECTRICAL

	<u>Video</u>	<u>Audio</u>
Input/Output Impedance	75Ω composite	10kΩ/200Ωbalanced/unbalanced
Input/Output Level	1.0Vpp nominal	0dBu nominal, 20dBu maximum
Bandwidth (±0.5dB)	10Hz to 10MHz	10Hz to 21kHz
Signal to Noise Ratio	>67dB (weighted)	>100dB (A weighted at max level)
Linearity	<.5% DG <.5°DP	<0.02% total harmonic distortion
Data Interface	RS232 or RS422 with RS485 also available on Channel 1	
Data Rate	DC to 400kbps	
Data Bit Error Rate	<1x10 <sup>-9</sup>	
Video Connector	BNC (composite)	
Audio/Data Connector	Female 44-pin D connector	

## OPTICAL

Transmitter Wavelength	1310nm or 1550nm (including CWDM devices from 1470 to 1610nm)
Transmitter Coupled Power	several options are available from -7dBm to +4dBm
Receiver Sensitivity	<-24dBm (PIN) <-34dBm (APD)
Reverse Path Sensitivity	<-38dBm
Link Budget	From 17dB to 40dB at 1310nm or 1550nm
Optical Connectors	ST standard, FC and SC 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

Power Requirements	9 to 20VDC @ 12VA max 90 to 265 VAC @ 20VA
Dimensions (mm)	100W x 208D x 25H card 105W x 210D x 55H modem case 483W x 210D x 44H 1RU case
Weight	0.2kg (card), 1.0kg (modem case), 2.9kg (1RU case)
Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Chassis Current Consumption (CCC)	0.8 Amp for 4-channel video only system Add 0.30 Amp for additional audio and/or data channels