OPTICAL SYSTEMS DESIGN

DIGITAL SINGLE CHANNEL VIDEO/AUDIO/DATA MODEMS

OSD8810 DIGITAL MICRO VIDEO TRANSMITTER

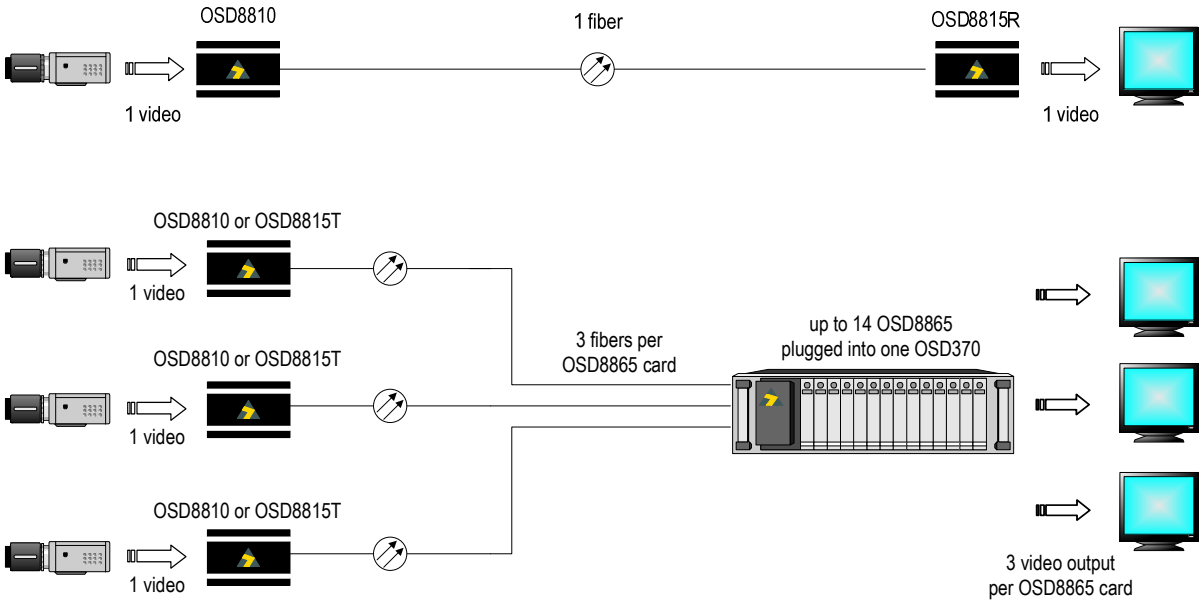
APPLICATIONS

- Surveillance links up to over 100km
- Industrial process monitoring
- Safe city CCTV system video transmission
- Broadcast links

FEATURES AND BENEFITS

- Extremely cost effective
- Extends wideband video transmission to over 3km of multimode fiber and at least 30km of singlemode fiber with 100km optionally possible
- Performance is maintained at the same quality over all link lengths
- Plugs directly onto the camera
- Eliminates length dependant adjustments often required with coax or Cat 5 based systems
- More secure than coaxial or Cat 5 cable
- Broadcast quality true 10 bit video with 10MHz bandwidth
- Operates with the OSD8815R and OSD8865 digital receivers
- Two high quality audio channels are optionally available

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD8810	Digital Micro Video Transmitter Module
Option A	Two Audio Channels

SPECIFICATIONS

ELECTRICAL

Input Impedance	75Ω
Input Level	1Vpp nominal
Bandwidth	5Hz to 10MHz + 1, -3dB
Weighted Video Signal to Noise Ratio	>65dB when operating with the OSD8815R or OSD8865
Weighted Video SNR with Audio Option	>63dB when operating with the OSD8815R or OSD8865
Differential Gain	<0.7%
Differential Phase	<0.7°
Video Connector	BNC plug

OPTIONAL AUDIO CHANNELS

Number of Channels	2
Bandwidth	10Hz to 20kHz +1,-3dB
Audio Input/Output impedance	>10KΩ/<200Ω
Audio Input Level	250mVrms nominal
Audio Output Level	250mVrms nominal
Audio Headroom	15dB
Audio Weighted Signal to Noise Ratio	>90dB at maximum level
Audio Distortion	<0.05%
Audio Connector	3.5mm stereo socket

OPTICAL

Transmitter Wavelength	1310 ± 30nm
Transmitter Coupled Power	-15 to -10dBm into singlemode fiber -10 to -5dBm into multimode fiber
Optical Connector	ST

PHYSICAL

Power Requirements	+9 to 35VDC or 22 to 28VAC @ 1.5VA
Power Connector	3.5mm 2-way terminal block
Enclosure	Elliptical extrusion
Dimensions (mm)	25 x 40 x 38L (excluding electrical and optical connectors)
Weight	50g
Operating Temperature	-40 to +75℃
Relative Humidity	0 to 95% non-condensing