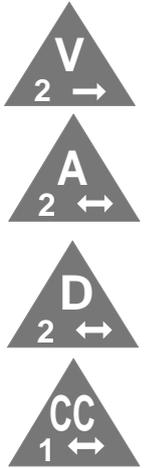


### OSD8320T & OSD8320R VIDEO (COMPOSITE & SDI), AUDIO AND DATA TRANSCEIVER PAIR



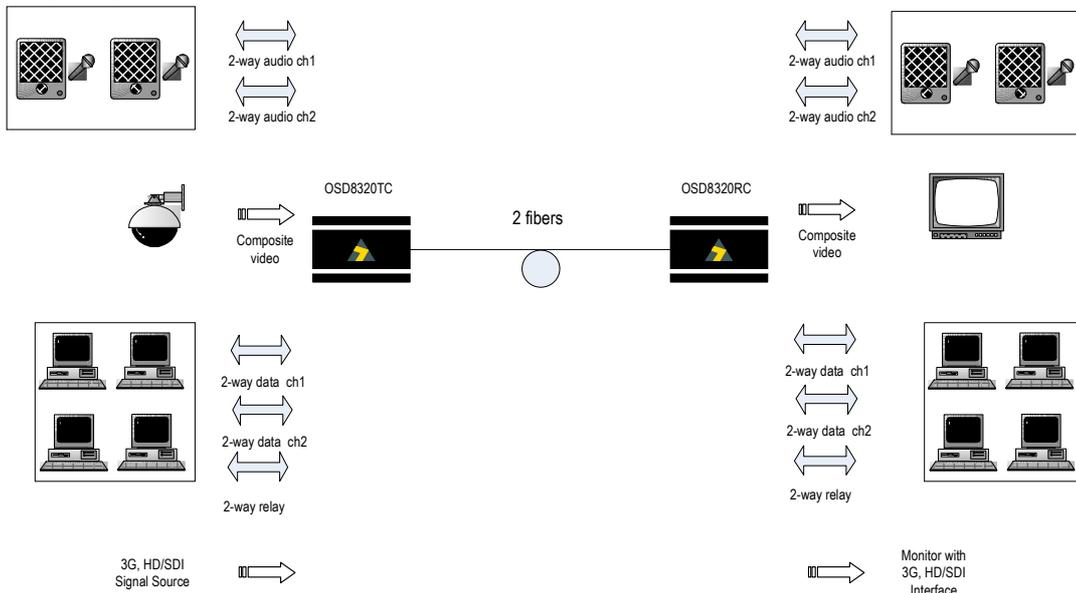
#### APPLICATIONS

- ▲ Broadcast networks using a mix of analog and HD/SDI cameras for their outside broadcast systems: the same fiber link equipment can be used for everything, thus reducing overall inventory and costs
- ▲ Broadcast television systems
- ▲ Extremely high quality video conferencing

#### FEATURES AND BENEFITS

- ▲ One way optic transmission of PAL, NTSC or SECAM video AND 3G HD/SDI signal with full duplex transmission of
  - two duplex analog audio channels
  - two duplex data channels
  - one duplex contact closure channel
- ▲ Studio quality 10 bit video and 24 bit audio
- ▲ Remote control of Pan, Tilt and Zoom for video surveillance or broadcast rigs.
- ▲ 3G HD/SDI available with built in user bypassable automatic reclocking at 270Mbps, 1.485Gbps and 2.97Gbps. When reclocking is bypassed the system operates from 19.4Mbps to 2.97Gbps
- ▲ 3G HD/SDI compatible with SMPTE 310M, 292M, 259M, 297M and 372M and 424M
- ▲ Automatic equalization of up to 350m @ 270Mbps and 70m @ 2.97Gbps of Belden 1694A cable
- ▲ Composite video inputs have 3dB overload capability.

#### TYPICAL APPLICATION DESIGN



#### ORDERING INFORMATION

OSD8320TC

1 channel composite video and 1 channel 3G HD/SDI transmitter module with 2 duplex audio channels and 3 duplex data channels

OSD8320RC

1 channel composite video and 1 channel 3G HD/SDI receiver module with 2 duplex audio channels and 3 duplex data channels



# SPECIFICATIONS

## ELECTRICAL

Video Input/Output Impedance	75Ω
Video Input/Output Level	1Vpp nominal (Composite), 800mVpp nominal (SDI)
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
SDI Coax Equalization	350m @ 270Mbps 140m @ 1.485Gbps 70m @ 2.97Gbps
Audio Input Impedance	>10KΩ or 600Ω, user selectable
Audio Output Impedance	<200Ω
Audio Bandwidth	5Hz - 21kHz ±1dB
Audio Input & Output Level	0dBu (0.775Vrms) nominal, balanced or unbalanced
Audio Headroom	19dB balanced, 13dB unbalanced
Audio Signal to Noise Ratio	>96dB at maximum level
Audio Distortion	<0.05%
Data Interface	TTL, RS232, RS422 and RS485
Data Rate	31kHz Manchester or Biphasic possible in either direction DC to >400kbps on 2 data channels DC to >100bps on relay channel
Audio and Data Connectors	15 pin female subminiature D connector 3-pin Mini-XLR for audio

## OPTICAL

Number of Fibers	One for analog video/audio/data (VAD), one for SDI
Transmitter Wavelengths	1310nm (VAD Tx and SDI)/1550nm (VAD Rx)
OSD8320T VAD Transmitter Coupled Power	-13 to -8dBm @ 1310nm into singlemode fiber
OSD8320T VAD Receiver Sensitivity	<-36dBm
OSD8320T VAD Receiver Saturation	>-10dBm
OSD8320R VAD Transmitter Coupled Power	-15 to -9dBm @ 1550nm into singlemode fiber
OSD8320R VAD Receiver Sensitivity	<-27dBm
OSD8320R VAD Receiver Saturation	>-3dBm
OSD8320T SDI Transmitter Coupled Power	-5 to 0dBm @ 1310nm into singlemode fiber
OSD8320R SDI Receiver Sensitivity	<-18dBm
OSD8320R SDI Receiver Saturation	>+2dBm
Link Distances	>30km on singlemode fiber @ 1310nm (fiber loss limited)
Optical Connectors	FC standard, others optional

## PHYSICAL

	<b>OSD8320T</b>	<b>OSD8320R</b>
Dimensions of Module (mm)	104W x 107D x 56H	
Weight of Module	400g	
Power Requirement	+10V to 24VDC @ 8VA	
Operating Temperature	-20 to +75°C	
Relative Humidity	0 to 95% non-condensing	
Indicators	Video Present	Optical Power Level (-6, -12, -18 & -21dBm)
	Optical Signal Ok	SDI Optical Signal Ok
	Carrier Detect	Reclocker locked or in bypass mode
	Locked	Video present
		Optical Signal Ok
<b>CONTROLS</b>	Audio Input Impedance	Audio Input Impedance
	Data Mode	Data Mode
	SDI Equalisation Bypass	Reclocker Bypass
	Reclocker Bypass	