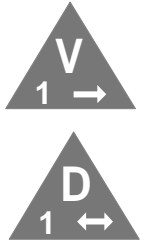


**OSD8327T/OSD8327R HD/SDI and DATA TX/RX PAIR**



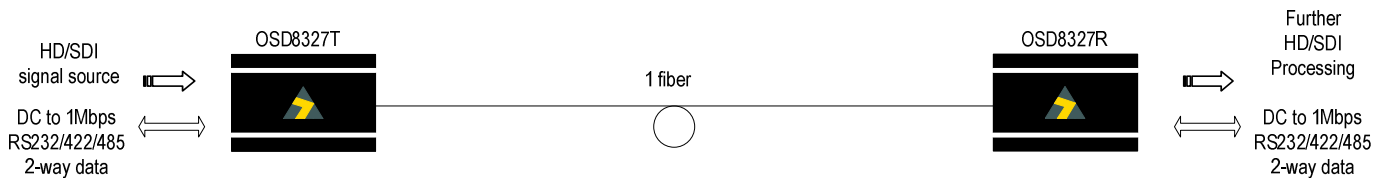
**APPLICATIONS**

- ▲ Any digital broadcast application such as studio signal routing and temporary OB or studio links requiring HD/SDI transmission plus duplex serial data
- ▲ Very high performance surveillance networks

**FEATURES AND BENEFITS**

- ▲ Basic functionality is that of OSD's well established OSD8227T/OSD8227R HD/SDI link plus the OSD138 multi-protocol serial data link
- ▲ 2 and 4-wire RS485, TTL, RS422, Manchester, Biphasic and RS232 operation from DC to 1Mbps
- ▲ Available with built in user bypassable automatic reclocking at 270Mbps, 1.485Gbps and 2.97Gbps
- ▲ Operates from 19.4Mbps to 2.97Gbps in non-reclocked mode
- ▲ Compatible with SMPTE 310M, 292M, 259M, 297M and 372M and 424M
- ▲ OSD8327T has two monitor ports and OSD8327R has one
- ▲ Automatic equalization of up to 350m @ 270Mbps, 140m @ 1.485Gbps and 70m @ 2.97Gbps of Belden 1694A cable
- ▲ Capable of operation over more than 30km
- ▲ Immune to pathological signals
- ▲ Capable of running off any unregulated supply from 10 to 28VDC
- ▲ Indication of HD/SDI operating rate

**TYPICAL APPLICATION DESIGN**



**ORDERING INFORMATION**

OSD8327T	HD/SDI Transmitter Card with Duplex Data over 3 fibers
OSD8327R	HD/SDI Receiver Card with Duplex Data over 3 fibers
Option W	2-fiber operation
Option CW	Single fiber operation
Option d	Reverse path data only
Option d.W	Reverse path data only with single fiber operation
Option C	Module Version
Option U	90 - 260VAC Powered 1RU 19" Rack Mounting Enclosure



# SPECIFICATIONS

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## ELECTRICAL

### HD/SDI VIDEO

Input/Output Impedance	75Ω
Input/Output Level	800 mVpp nominal
Coax Equalization	350m @ 270Mbps 140m @ 1.485Gbps 70m @ 2.97Gbps
HD/SDI Connectors	BNC female sockets
HD/SDI Indicators	Loss of electrical signal (OSD8327T) Loss of optical signal (OSD8327R) Reclocker locked Six data rate indicators
HD/SDI Link Controls	Reclocker Bypass Coax equalizer bypass (OSD8327T)
HD/SDI Monitor Ports	Two (OSD8327T) One (OSD8327R)

### DATA

Data rate	DC to 1Mbps NRZ
Pulse Distortion and Jitter	<±0.3μsec over full dynamic range
Input	User selectable between RS422/RS485 levels, TTL on the + input with - input floating or RS232 levels
User Controls	A 6-way user adjustable lever switch controls: RS422/RS232 or RS485 RS232 polarity 2-wire or 4-wire RS485 RS485 bias on/off RS485 turnaround times

### OPTICAL

HD/SDI Transmitter Wavelength	1310nm ±30nm (1550nm optionally available)
HD/SDI Transmitter Coupled Power	-5 to -0dBm (0dBm and +2dBm are optional)
HD/SDI Receiver Sensitivity	<-20dBm for 1 x 10 <sup>-9</sup> Bit Error Rate
Data Link Transmitter Wavelength	1310nm ± 30nm or 1510 to 1590nm
Data Link Transmitter Coupled Power	-15 to -12dBm
Data Link Receiver Sensitivity	<-37dBm for 1 x 10 <sup>-9</sup> Bit Error Rate
Standard Optical Link Budget	>15dB at 1310nm (>30km of singlemode fiber)
Optical Connector	ST standard, FC and SC optional

**NOTE:** Special configurations are also available. Contact OSD for a full listing of available options

### PHYSICAL

Electrical Connectors	9 pin male subminiature D connector for power on card 2 way terminal block with screw clamps for power on module 8 way terminal block with screw clamps for data
Dimensions (mm)	100W x 208D x 25H card module 114W x 105D x 31H modem case
Weight	0.3kg (card), 0.8kg (modem case)
Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Power Requirements	+10 to 28VDC