

**OSD8224T/OSD8224R 4-CHANNEL  
3G HD/SDI TX/RX PAIR**



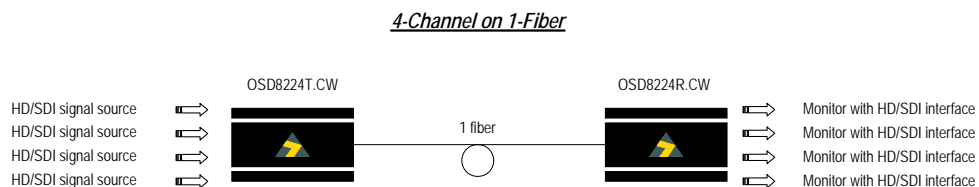
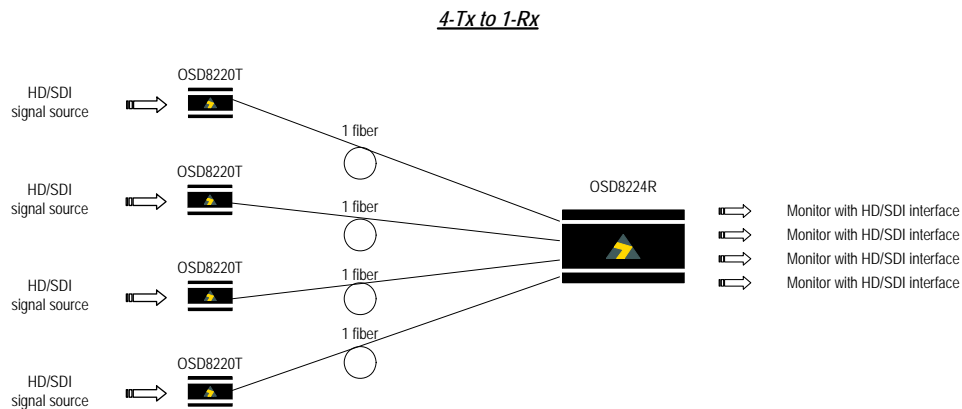
**APPLICATIONS**

- σ Any digital broadcast application such as studio signal routing and temporary OB or studio links
- σ Remote camera links
- σ Campus digital video distribution

**FEATURES AND BENEFITS**

- σ Available with built in user bypassable automatic reclocking at 270Mbps, 1.485Gbps and 2.97Gbps
- σ Operates from 19.4Mbps to 2.97Gbps in non-reclocked mode
- σ Compatible with SMPTE 310M, 292M, 259M, 297M and 372M and 424M
- σ Automatic equalization of up to 350m @ 270Mbps and 70m @ 2.97Gbps of Belden 1694A cable
- σ Available in 1310nm, 1550nm and all eighteen CWDM wavelengths
- σ Available with built in CWDM multiplexer for 4-channel single fiber operation
- σ Capable of operation over more than 50km
- σ Immune to pathological signals
- σ Available as a card which plugs into OSD's standard 19" chassis or as a small rugged module suitable for both permanent and temporary throwdown applications

**TYPICAL APPLICATION DESIGN**



**ORDERING INFORMATION**

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|-----------|--|
| OSD8224T  | 4-Channel 3G HD/SDI Transmitter Module                 |
| OSD8224R  | 4-Channel 3G HD/SDI Receiver Module                    |
| Option X  | Built in reclocker for 270Mbps, 1.485Gbps and 2.97Gbps |
| Option M  | Module version   |
| Option CW | 4-Channel Operation on one Singlemode Fiber            |



# SPECIFICATIONS

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## ELECTRICAL

Number of Channels	4
Input/Output Impedance	75Ω
Input/Output Level	800 mVpp nominal
Coax Equalization	350m @ 270Mbps 140m @ 1.485Gbps 70m @ 2.97Gbps
SDI Connectors	BNC female socket
Power Connector	4 way terminal block with screw clamps on module, DB9 on card

## OPTICAL

Number of Fibers	4 for standard unit, 1 for CWDM unit
Fiber Type	Singlemode is standard. Consult factory for advice on operation with multimode fiber.
Transmitter Wavelength	1310nm ±30nm (1550nm and all 18 CWDM wavelengths are optionally available. Standard 4-Channel CWDM module operates on 1510, 1530, 1550 and 1550nm)
Transmitter Coupled Power	>-7dBm (0dBm and +2dBm are optional)
Receiver Operating Wavelength	1200 to 1600nm
Receiver Sensitivity	<-18dBm for 1 x 10 <sup>-9</sup> Bit Error Rate
Optical Link Budget	>11dB at 1310nm (>20km of singlemode fiber) >20dB at 1550 with +2dBm laser (>60km of singlemode fiber)
Receiver Saturation	>0dBm
Optical Connectors	ST standard

## PHYSICAL

	<b>OSD8224T Transmitter</b>	<b>OSD8224R Receiver</b>
Dimensions of Module (mm)	104L x 104W x 25H	104L x 104W x 25H
Weight of Module	400g	400g
Dimensions of Card (mm)	25W x 208D x 100H	25W x 208D x 100H
Power Requirements	+5 to 20VDC @ 400mA	+5 to 20VDC @ 400mA
Indicators/Channel	Loss of electrical signal Reclocker locked *	Loss of optical signal Reclocker locked *
Controls/Channel	Reclocker Bypass * Coax equalizer bypass	Reclocker bypass *
Operating Temperature	-20 to 75°C	-20 to 75°C
Relative Humidity	0 to 95% non-condensing	0 to 95% non-condensing

\* Only for units fitted with reclocker (Option X)

Doc. ID: 102822401