

OSD8224TDW36E10/OSD8224RDW36 4-CHANNEL  
LONG HAUL 3G HD/SDI TX/RX PAIR



APPLICATIONS

- ▲ Any digital broadcast application such as studio signal routing and temporary OB or studio links
- ▲ Campus digital video distribution
- ▲ Very high performance surveillance networks
- ▲ Remote monitoring of very high value sites



FEATURES AND BENEFITS

- ▲ Built in user bypassable automatic reclocking at 270Mbps, 1.485Gbps and 2.97Gbps with indication of data rate on each channel
- ▲ Operates from 19.4Mbps to 2.97Gbps in non-reclocked mode
- ▲ 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
- ▲ OSD8824T includes an optical booster amplifier with 10dB gain
- ▲ OSD8224R includes high sensitivity Avalanche Photodiode (APD) receivers
- ▲ Standard system operates on 200GHz grid with DWDM wavelengths C30, C32, C34 and C36 but is available using any contiguous four wavelengths in the 200GHz ITU C-Band DWDM grid
- ▲ Designed for singlemode fiber
- ▲ Built in DWDM200GHz multiplexer (OSD8224T) or demultiplexer (OSD8224R) for 4-channel single fiber operation
- ▲ Capable of operation over more than 120km at all rates up to 3G HD/SDI
- ▲ Immune to pathological signals
- ▲ Transmitter and receiver are both available in a 100 - 260VAC powered 1RU high 19" rack mounting enclosure

ORDERING INFORMATION

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|------------------------|---|
| OSD8224TDW36E10.SC/APC | 4-Channel 3G HD/SDI Transmitter unit with optical amplifier and DWDM operation in a 240VAC powered 1RU enclosure (SC/APC optical connector) |
| OSD8224RDW36.SC/APC    | 4-Channel 3G HD/SDI Receiver unit with APD receivers and DWDM operation in a 240VAC powered 1RU enclosure (SC/APC optical connector)        |



# 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	Combined IEC socket, Fuse and On/Off switch power inlet module

## OPTICAL

Number of Fibers	1
Fiber Type	Singlemode only
Transmitter Wavelengths	1548.51nm, 1550.12nm, 1551.72nm, 1553.33nm (All +/-0.15nm) are standard. Contact OSD for other groupings
Transmitter Coupled Power	+6 to +8dBm per wavelength (Total power = +12 to +14dBm)
Receiver Operating Wavelengths	As per matching DWDM transmitter +/-0.5nm
Receiver Sensitivity	<-26dBm per wavelength for 1 x 10 <sup>-9</sup> Bit Error Rate (Total power <-20dBm)
Optical Link Budget	>32dB in the 1550nm window
Receiver Saturation	>-15dBm per wavelength (Total power >-9dBm)
Optical Connector(s)	SC/APC standard. Other APC type connectors are optional

## CONTROLS & INDICATORS

	<b>OSD8224TDW Transmitter</b>	<b>OSD8224RDW Receiver</b>
Indicators/Channel	Loss of electrical input signal Reclocker locked Operating speed Laser Fail	Loss of optical input signal Reclocker locked Operating speed
Controls/Channel	Reclocker Bypass Coax equalizer bypass	Reclocker bypass
System Indicators	Power EDFA OK	Power

## PHYSICAL

Power Requirements	90 to 265 VAC @ 20VA via IEC power inlet module
Dimensions (mm)	483W x 210D x 44H 1RU case
Weight	2.9kg
Operating Temperature	-20 to +60°C
Relative Humidity	0 to 95% non-condensing