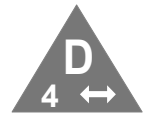


**OSD730 FULL DUPLEX FOUR CHANNEL
DIGITAL AUDIO/DATA SYSTEM**

APPLICATIONS

- ☐ Studio audio distribution
- ☐ Duplex sound stage to console connection
- ☐ Campus audio program distribution
- ☐ Public address systems
- ☐ High end intercom systems



FEATURES AND BENEFITS

- ☐ Supports 4 full duplex audio and data channels
- ☐ Broadcast quality 18 bit digital audio transmission
- ☐ Data can be RS232 or RS422 on all four channels with one channel also RS485 capable
- ☐ Available as a card or as a sturdy standalone module
- ☐ User settable turnaround delay on RS485 channel

TYPICAL APPLICATION DESIGN



ORDERING INFORMATION

OSD730	850nm multimode transceiver card
OSD730L	1310nm single-mode or multimode transceiver
Option C	standalone module format
Option W	single fiber operation



SPECIFICATIONS

ELECTRICAL

Audio Channels

Number of Channels	4
Nominal Level	0dBu (775mV) nominal
Headroom	18dB
Input Impedance	10k Ω (600 Ω factory-configured option)
Output Impedance	300 Ω
Format	Balanced input and output
System Gain	0dB+/-1dB with source impedance <1k Ω and load >10k Ω
Signal to Noise Ratio	>70dB at nominal level
Total Harmonic Distortion	<0.05% at nominal level
Bandwidth (-3dB)	10Hz to 20kHz
Indicators	Red indicator for active transmit channels Green indicator for active receive channels

Data

Number of Channels	4, each operating at up to 100kbps
Data Interface	RS232 or RS422 on all 4, RS485 available on channel 1
Channel 1 Controls	RS485/Normal
	Turnaround delays adjustable from 43 μ S to 87mS (8 steps)
Indicators	Red indicator for active transmit channels Green indicator for active receive channels

OPTICAL

Optical Wavelength	850nm (OSD730) 1310nm (OSD730L)
Transmit Power	-15 to -10dBm into multimode fiber (OSD730 only) -15 to -10dBm into single-mode fiber (OSD730L only)
Receiver Sensitivity	<-39dBm
Receiver Saturation	>-12dBm
Link Budget and Transmission Distance	>24dB (>7km for multimode, >60km for single-mode)
Link Status Indicator	Green for established optical link, red for no optical link.
Optical connectors	ST Standard

ENVIRONMENTAL, PHYSICAL, POWER

Operating Temperature	-20 to +75°C
Relative Humidity	0 to 95% non-condensing
Dimension of Module (mm)	104W x 144D x 25H
Weight of Module	400g
Dimensions of Card (mm)	25W x 208D x 100H
Weight of Card	200g
Power Requirements	10 to 28VDC or 15 to 20VAC @ 4VA

Chassis Current Consumption (CCC)	0.30 Amp
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44 PIN FEMALE D CONNECTOR PIN ASSIGNMENTS

Function	Pin	Function	Pin	Function	Pin	Function	Pin
Digital Ground	1, 4,7	Link Alarm	22	Analog Ground	37,38,39,40	Analog Ground	41,42,43,44
Data I/P1+	16	Data O/P1+	2	Audio I/P1+	8	Audio O/P1+	9
Data I/P1 -	31	Data O/P1 -	17	Audio I/P1 -	23	Audio O/P1 -	24
Data I/P2+	32	Data O/P2 +	18	Audio I/P2+	10	Audio O/P2+	11
Data I/P2 -	3	Data O/P2 -	33	Audio I/P2 -	25	Audio O/P2 -	26
Data I/P3+	19	Data O/P3+	5	Audio I/P3+	12	Audio O/P3+	13
Data I/P3 -	34	Data O/P3 -	20	Audio I/P3 -	27	Audio O/P3 -	28
Data I/P4+	35	Data O/P4+	21	Audio I/P4+	14	Audio O/P4+	15
Data I/P4 -	6	Data O/P4 -	36	Audio I/P4 -	29	Audio O/P4 -	30

NOTE: O/P: output from OSD730 to external equipment
I/P: input to OSD730 from external equipment

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