

OTS-1HD2DTR

Optiva[™] Standard, 1 HD-SDI 270/1485 Mbps w/Loopback and 2 Duplex RS-232/422/485 Data

HD-SDI Video and Audio Transmission

The OTS-1HD2DTR provides for the digital



Video

transmission of 1 Channel of HD-SDI Video with Loopback and 2 Channels of Duplex Serial Data, at absolute broadcast quality.

System Design

Audio

←2→

Data

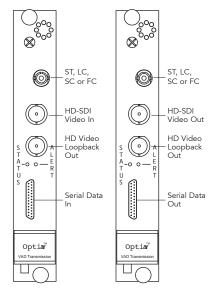
All units come in an insert card version.
The cards can be inserted into our 16-slot,
19" rack-mountable card cage (OT-CC-16-100)
or one of our smaller Optiva™ Desktop
Card Racks (OT-DTCR Series).

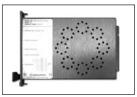
The Optiva™ Desktop Card Racks can handle one, two or four insert cards, creating compact, mountable, stand alone systems. The use of separate OT-DTCR enclosures allows for future flexibility and expansion as all cards are hot-swappable and can be used in any enclosure. Each one of our card housing units operate with an appropriate power supply. See "Accessories" for power supply specifications.

Optiva[™] Upgrade Path

This system can be purchased without an optical port as an add-on to an existing Optiva™ system daisy-chain. (See "Non-Optical Version" below).

The Optiva[™] bandwidth requirement of this system is 1902 Mbps.





Each insert card comes with a label identifying the specific protocols handled, connector pin-out and other vital information.

For optimal bandwidth allocation, each insert card can daisy-chain with an additional card in the same chassis. See "Optiva" Upgrade Path".

OTS-1HDT2DTR OTS-1HDR2DRT

Features

- Uncompressed HD-SDI Video and Serial Data over one fiber
- TDM Single fiber, dual wavelength
- Complies with SMPTE standards for Video transmission
- Compatible with MDM-7000 Series for WDM and CWDM multiplexing
- No EMI or RFI and no ground loops
- Stand alone or rack-mount
- Ideal for Broadcast/Studio and Professional AV applications

Versions Available*

Wavelength (nm) & Fiber	Transmit/Receive**	Receive/Transmit**	Optical Connector	Optical Budget (dB)	Range*** (km)	Form Factor
1310/1550 Multimode	OTS-1HDT2DTR-B1/B3M-XX-IC	OTS-1HDR2DRT-B3M/B1-XX-IC	ST, FC, LC or SC	10	1.5	IC (1-slot)
1310/1550 Singlemode	OTS-1HDT2DTR-B2/B3-XX-IC	OTS-1HDR2DRT-B3/B2-XX-IC	ST, FC, LC or SC	12	20	IC (1-slot)
1310/1550 Singlemode (r	o) OTS-1HDT2DTR-B2/B3D-XX-IC	OTS-1HDR2DRT-B3D/B2-XX-IC	ST, FC, LC or SC	17	40	IC (1-slot)
1310/1550 Singlemode (F	H) OTS-1HDT2DTR-B2/B3D-XX-IC	OTS-1HD2DRT-B3H/B2-XX-IC	ST, FC, LC or SC	25	60	IC (1-slot
1270-1610 SM (сwbм)	OTS-1HDT2DTR-L4/L4-XX-IC	OTS-1HDR2DRT-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (1-slot)
Non-Optical Version	OTS-1HDT2DTR-NOC-IC	OTS-1HDR2DRT-NOC-IC	N/A	N/A	N/A	IC (1-slot)

Serial Data Codes - "D" indicates RS-232. For other Serial Data preferences, please use: "DJ" = RS-422; "DK" = RS-485 (2W); and "DW" = RS-485 (4W).

^{*} Contact Opticomm for other versions available.

^{**} XX indicates the type of optical connector. Each of ST, FC, LC or SC are available.

^{***} Chromatic dispersion and additional losses should be taken into account.

Video

Standard SMPTE 292 & 259

Pathological Test Code RP-178

Nominal Bit Rate 1.485 Gbps; 270 Mbps

Bit error rate 10⁻¹⁴

Connector BNC (IEC 60169-8; Gold Plated)

Data

Connector Micro DB25

RS-232, RS-422

Data Rate DC to 1 Mbps

RS-485 (2 Wire)

Data Rate DC to 1 Mbps

RS-485 (4 Wire)

Data Rate DC to 1 Mbps

Contact Closure

Data Rate DC to 1 Mbps

General

Dimensions & Weight Insert Card (IC): 6.3" L x 0.8" W x 4.0" H 11 oz

Operating temperature -20° C to +55° C Storage temperature -40° C to +85° C

Humidity 0 to 95% non-condensing

Operating voltage 9-12 V_{DC}

Consumption 1 Amp Max per Insert Card

System Latency Less than 1ms

Local Monitoring LED Status Indication

Remote Monitoring Compatible with OptivaViewTM

SNMP Management Suite

Optiva™ Configurable Communication Platform

Network Management

SDI & HD-SDI

Composite Video, Audio & Data

RGB/VGA/DVI

Audio/FSK/Intercom

Data (Ethernet/Serial/USB)

CATV/RF & L-Band

Optical Switching, Routing & Redundancy

Passive Multiplexing Solutions

Enclosures, Racks & Frames

Power Supplies & Accessories







CE



MADE IN THE USA

Sample Configuration

