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travel by light™

OTS-1HD2DTR
Optiva™ Standard,
1 HD-SDI 270-1485 Mbps w/Loopback
and 2 Duplex RS-232/422/485 Data

1 Video

2 Data

HD-SDI Video and Audio Transmission

The OTS-1HD2D provides for the digital transmission of 1 Channel of HD-SDI Video with Loopback and 2 Channels of Duplex Serial Data, at absolute broadcast quality.
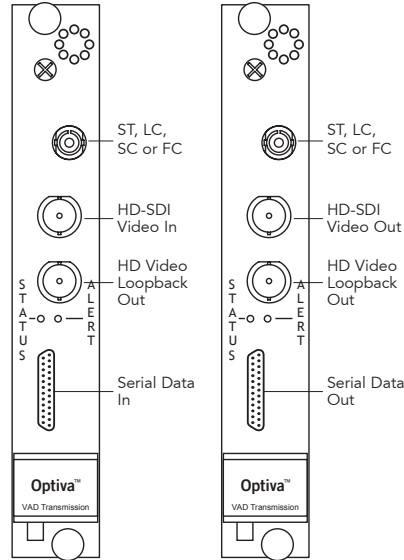
System Design

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

The Desktop Card Racks can handle one, two or four insert cards, creating compact, mountable, stand alone systems. The use of separate 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.
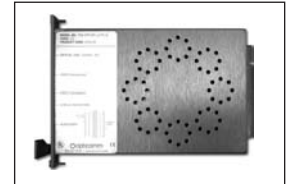
Optiva™ Upgrade Path

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 1716 Mbps.

ST, LC, SC or FC
HD-SDI Video In
HD Video Loopback Out
Serial Data In
STATUS
ALERT
Optiva™ VAD Transmission

ST, LC, SC or FC
HD-SDI Video Out
HD Video Loopback Out
Serial Data Out
STATUS
ALERT
Optiva™ VAD Transmission

OTS-1HDT2DTR   **OTS-1HDR2DTR**

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".**

Features

- Uncompressed HD-SDI Video and Serial Data over one fiber
- TDM - Single fiber, dual wavelength
- True DC restoration
- Flat frequency response
- 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-B2/B3M-XX-IC	OTS-1HDR2DTR-B3M/B2-XX-IC	ST, FC, LC or SC	10	1.5	IC (1-slot)
1310/1550 Singlemode	OTS-1HDT2DTR-B2/B3-XX-IC	OTS-1HDR2DTR-B3/B2-XX-IC	ST, FC, LC or SC	14	20	IC (1-slot)
1310/1550 Singlemode (D)	OTS-1HDT2DTR-B2/B3D-XX-IC	OTS-1HDR2DTR-B3D/B2-XX-IC	ST, FC, LC or SC	21	40	IC (1-slot)
1270-1610 SM (CWDM)	OTS-1HDT2DTR-L4/L4-XX-IC	OTS-1HDR2DTR-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (1-slot)
Non-Optical Version	OTS-1HDT2DTR-NOC-IC	OTS-1HDR2DTR-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.

NOTE: The systems in this category offer transmission of certain signals in set configurations. If your application involves multi-signal transmission and/or would benefit from system upgradeability, please visit the Optiva™ Platform section on page 14. To configure an Optiva™ system to your precise needs, please register for the 'Product Configurator' at www.opticomm.com

Video

Standard	SMPTE 292M & 259M
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	1A Max per Insert Card	
System Latency	Less than 1ms	

Local Monitoring	LED Status Indication
Remote Monitoring	Compatible with OptivaView™ SNMP Management Suite

Navigation sidebar

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

10 YEAR WARRANTY

ISO 9001:2000 CERTIFIED

UL

CE

FCC PART 15 COMPLIANT

Emissions: FCC Part 15, ICES-003, AS/NZS, 3548, EN55022
Immunity: ENVS0204, EN61000-4-2,3,4,5,6,11
Safety: UL1950, CAN/CSA 22.2, NO.950-95

MADE IN THE USA

Sample Configuration

HD-SDI → OTS-1HDT2DTR — 1 Fiber — OTS-1HDR2DTR → HD-SDI
Data x 2
Local Loopback
Second Output
Data x 2