opticomm
an emcore company
travel by light®

OTS-1VTR2DTR
Optiva® Standard, 1 Duplex Composite Video and 2 Duplex RS-232/422/485 Data

1 Video

2 Data

Composite Video and Serial Data

The OTS-1VTR2DTR provides for the digital transmission of 1 Channel of Duplex Composite Video and 2 Channels of Duplex Serial Data.

System Design

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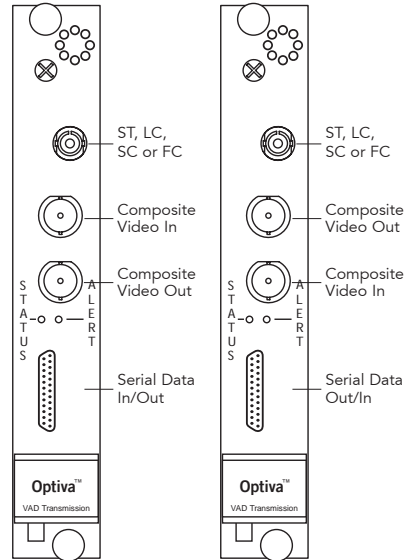
The Optiva® Desktop Card Racks can handle one, two or four insert cards, creating compact, mountable, stand alone systems. The use of separate OT-DTCR enclosures allows for future flexibility and expansion as all cards are hot-swappable and can be used in any enclosure. Each one of our card housing units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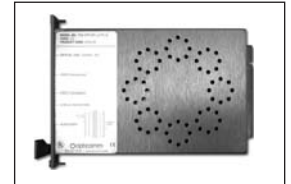
Optiva® Upgrade Path

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 369 Mbps.

ST, LC, SC or FC
Composite Video In
Composite Video Out
Serial Data In/Out

OTS-1VTR2DTR

ST, LC, SC or FC
Composite Video Out
Composite Video In
Serial Data Out/In

OTS-1VRT2DRT

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

- Composite Video and Serial Data over one fiber
- 12-Bit Digital Transmission (Video)
- 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-1VTR2DTR-A1/A3M-XX-IC	OTS-1VTR2DRT-A3M/A1-XX-IC	ST, FC, LC or SC	10	3	IC (1-slot)
1310/1550 Singlemode	OTS-1VTR2DTR-A2/A3-XX-IC	OTS-1VTR2DRT-A3/A2-XX-IC	ST, FC, LC or SC	12	20	IC (1-slot)
1310/1550 SM (D)	OTS-1VTR2DTR-A2/A3D-XX-IC	OTS-1VTR2DRT-A3D/A2-XX-IC	ST, FC, LC or SC	17	40	IC (1-slot)
1310/1550 SM (H)	OTS-1VTR2DTR-A2/A3H-XX-IC	OTS-1VTR2DRT-A3H/A2-XX-IC	ST, FC, LC or SC	25	60	IC (1-slot)
1270-1610 SM (CWDM)	OTS-1VTR2DTR-L4/L4-XX-IC	OTS-1VTR2DRT-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (1-slot)
Non-Optical Version	OTS-1VTR2DTR-NOC-IC	OTS-1VTR2DRT-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 170M; RS-250C (Short Haul)
Bit Resolution	12-Bit Digital Transmission
Level	1.0 Volt p-p
Bandwidth	5.5 MHz
Differential Gain	< 2%
Differential Phase	< 0.7°
Passband Ripple	< ±0.2 dB to 5.5 MHz
Chroma/Luma Delay	<12ns
Compatibility	NTSC, PAL, SECAM
Signal to Noise Ratio	> 67 dB
Connector	BNC (IEC 60169-8)

Data

RS-232, RS-422

RS-485 (2 Wire)

RS-485 (4 Wire)

Data Rate	DC to 1 Mbps
Connector	Micro DB25

Contact Closure

Connector	Micro DB25

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	< 7w per insert card
System Latency	Less than 1ms

Local Monitoring   LED Status Indication

Remote Monitoring   Compatible with OptivaView™
SNMP Management Suite

10 YEAR WARRANTY   **ISO 9001:2000 CERTIFIED**

CSA   CE

FCC PART 15 COMPLIANT

MADE IN THE USA

Sample Configuration

Video → OTS-1VTR2DTR ← 1 Fiber → OTS-1VRT2DRT → Video
Data x 2