



Video



Audio



Data

### Composite Video, Audio and Data Transmission

The OTS-1VTR2ATR4DTR provides for the digital transmission of 1 Channel of Duplex Composite Video, 2 Channels of Duplex Analog Audio and 4 Channels of Duplex Serial Data.

### System Design

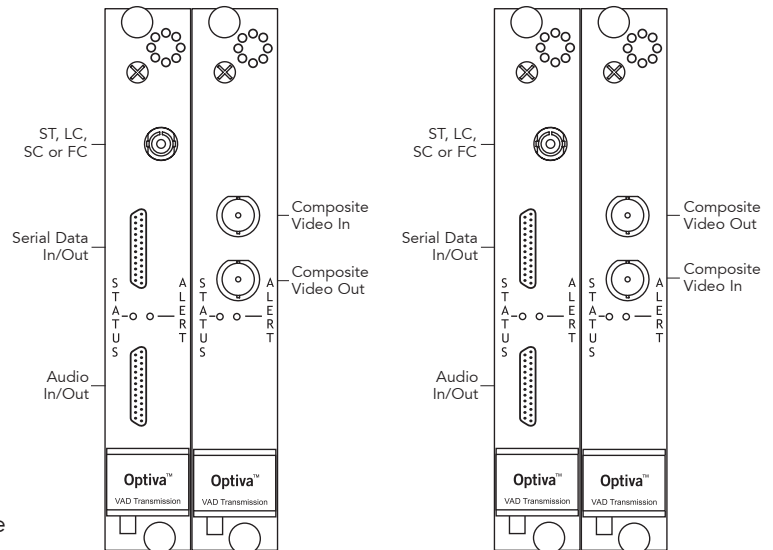
All units come in an insert card version. The cards can be inserted into our 16-slot, 19" rack-mountable card cage (OT-CC-16-100) or one of our smaller Optiva™ Desktop Card Racks (OT-DTCR Series).

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 397 Mbps.



OTS-1VTR2ATR4DTR

OTS-1VRT2ART4DRT

### Features

- Composite Video, Analog Audio and Serial Data over one fiber
- TDM - Single fiber, dual wavelength
- Complies with SMPTE 259M for uncompressed SDI
- 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 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-1VTR2ATR4DTR-A1/A3M-XX-IC	OTS-1VRT2ART4DRT-A3M/A1-XX-IC	ST, FC, LC or SC	10	3	IC (2-slots)
1310/1550 Singlemode	OTS-1VTR2ATR4DTR-A2/A3-XX-IC	OTS-1VRT2ART4DRT-A3/A2-XX-IC	ST, FC, LC or SC	12	20	IC (2-slots)
1310/1550 SM (b)	OTS-1VTR2ATR4DTR-A2/A3D-XX-IC	OTS-1VRT2ART4DRT-A3D/A2-XX-IC	ST, FC, LC or SC	17	40	IC (2-slots)
1310/1550 SM (H)	OTS-1VTR2ATR4DTR-A2/A3H-XX-IC	OTS-1VRT2ART4DRT-A3H/A2-XX-IC	ST, FC, LC or SC	25	60	IC (2-slots)
1270-1610 SM (CWDM)	OTS-1VTR2ATR4DTR-L4/L4-XX-IC	OTS-1VRT2ART4DRT-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (2-slots)
<b>Non-Optical Version</b>	OTS-1VTR2ATR4DTR-NOC-IC	OTS-1VRT2ART4DRT-NOC-IC	N/A	N/A	N/A	IC (2-slots)

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).

Analog Audio Codes - To indicate your Analog Audio impedance preference, please use the following instead of "A" in the model number: "AB" = Input Balanced 600 Ohm, Output Balanced 600 Ohm; "ABH" = Input Balanced Hi-Z, Output Balanced Low-Z; and "AUH" = Input Unbalanced Hi-Z, Output Unbalanced Low-Z.

\* Contact Opticomm for other versions available.

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\*\* 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.

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Opticomm reserves the right to change specifications without notice

# Composite Video, Audio & Data

## Video

Standard	SMPTE 170M; RS-250C
Bit Resolution	10-Bit Processing; 10-Bit Transmission
Level	1.0 Volt p-p
Bandwidth	5.5 MHz
Differential Gain	< 1%
Differential Phase	< 0.7°
Compatibility	NTSC, PAL
Signal to Noise Ratio	> 67 dB
Connector	BNC (IEC 60169-8)

## Analog Audio

Level	6 dBm In/Out
Bandwidth	20 Hz to 20 KHz
Signal to Noise Ratio	> 80 dB
Total Harmonic Distortion	< 0.1%
Signal Coding	20-bit
Connector	Micro DB25

## Impedance Options:

Input	Output
Balanced 600 Ohm	Balanced 600 Ohm
Balanced Hi-Z	Balanced Low-Z
Unbalanced Hi-Z	Unbalanced Low-Z

## Data

Connector	Micro DB25
<b>RS-232, RS-422</b>	
Data Rate	DC to 1 Mbps
<b>RS-485 (2 Wire)</b>	
Data Rate	DC to 1 Mbps
<b>RS-485 (4 Wire)</b>	
Data Rate	DC to 1 Mbps
<b>Contact Closure</b>	
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 <sub>DC</sub>	
Consumption	1 Amp Max per Insert Card	
System Latency	Less than 1ms (Audio <10ms)	

**Local Monitoring** LED Status Indication

**Remote Monitoring** Compatible with OptivaView™  
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



## Sample Configuration

