



Video

Audio



Data

### Composite Video and Data Transmission

The OTS-2V4DTR provides for the digital transmission of 2 Channels of Composite Video and 4 Channels of Duplex Serial Data.

### System Design

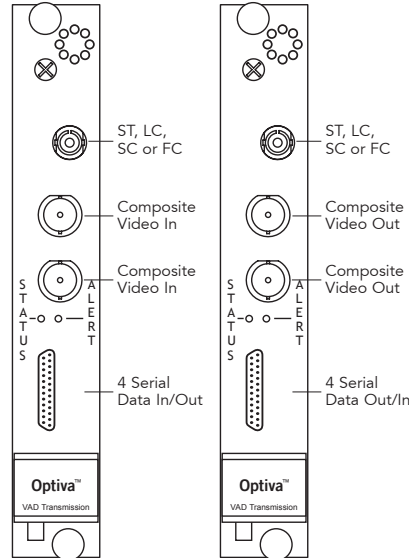
All units come in an insert card version. The cards can be inserted into our 16-slot, 19" rack-mountable card cage (CC-16-100) or one of our smaller Optiva™ Desktop Card Racks (DTCR Series).

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

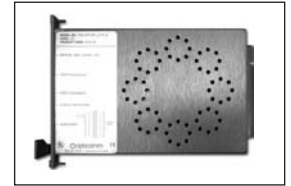
This system can be purchased without an optical port as an add-on to an existing Optiva™ system daisy-chain. (See "Non-Optical Version" below).

**The Optiva™ bandwidth requirement of this system is 648 Mbps.**



OTS-2VT4DTR

OTS-2VR4DTR



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
- TDM - Single fiber, dual wavelength
- True DC restoration
- Flat frequency response
- Complies with SMPTE 259 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 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-2VT4DTR-A2/A3M-XX-IC | OTS-2VR4DTR-A3M/A2-XX-IC | ST, FC, LC or SC  | 10                  | 3             | IC (1-slot) |
| 1310/1550 Singlemode       | OTS-2VT4DTR-A2/A3-XX-IC  | OTS-2VR4DTR-A3/A2-XX-IC  | ST, FC, LC or SC  | 14                  | 20            | IC (1-slot) |
| 1310/1550 SM (D)           | OTS-2VT4DTR-A2/A3D-XX-IC | OTS-2VR4DTR-A3D/A2-XX-IC | ST, FC, LC or SC  | 21                  | 40            | IC (1-slot) |
| 1270-1610 SM (CWDM)        | OTS-2VT4DTR-L4/L4-XX-IC  | OTS-2VR4DTR-L4/L4-XX-IC  | ST, FC, LC or SC  | Varies              | 20-70         | IC (1-slot) |
| <b>Non-Optical Version</b> | OTS-2VT4DTR-NOC-IC       | OTS-2VR4DTR-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](http://www.opticomm.com)

# Composite Video, Audio & Data

|                       |   |
|-----------------------|---|
| <b>Video</b>          |   |
| Standard              | SMPTE 170M;<br>Exceeds RS-250C Short Haul |
| Bit Resolution        | 10-Bit Processing; 10-Bit Transmission    |
| Level                 | 1.0 Volt p-p                              |
| Bandwidth             | 9 MHz                                     |
| Differential Gain     | <2%                                       |
| Differential Phase    | <0.7%                                     |
| Compatibility         | NTSC, PAL, SECAM                          |
| Signal to Noise Ratio | >67 dB                                    |
| Connector             | BNC (IEC 60169-8)                         |

|                        |              |
|------------------------|--------------|
| <b>Data</b>            |              |
| 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 |

|                       |  |
|-----------------------|--|
| <b>General</b>        |  |
| 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           | 1A Max per Insert Card                           |
| System Latency        | Less than 1ms                                    |

**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

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



**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

