

1 →

Video

↔ **2** ↔

Audio

↔ **1** ↔

Data

↔ **1** ↔

Ethernet

Composite Video, Audio, Serial Data and Ethernet Transmission

The OTS-1V provides for the digital transmission of 1 Channel of Composite Video, 2 Channels of Duplex Analog Audio, 1 Channel of Duplex Serial Data and 1 Channel of Duplex 10/100 Ethernet.

System Design

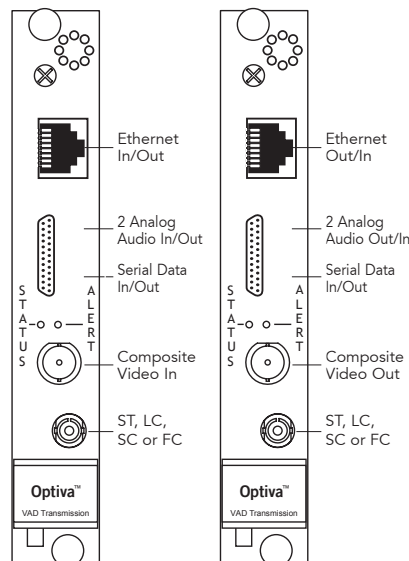
All units come in an insert card version. The cards can be inserted into our 16-slot, 19" rack-mountable card cage (CC-16-100) or one of our smaller Optiva™ Desktop Card Racks (DTCR Series).

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.

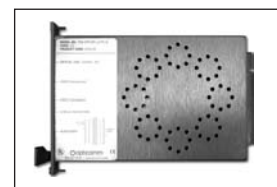
Optiva™ Upgrade Path

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 438 Mbps.



OTS-1V2ATR1DTR1ETR OTS-1V2ATR1DTR1ETR



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, Analog Audio, Serial Data and Ethernet over one fiber
- 10-Bit Digital Transmission
- 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 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-1V2ATR1DTR1ETR-A2/A3M-XX-IC	OTS-1V2ATR1DTR1ETR-A3M/A2-XX-IC	ST, FC, LC or SC	10	3	IC (1-slot)
1310/1550 Singlemode	OTS-1V2ATR1DTR1ETR-A2/A3-XX-IC	OTS-1V2ATR1DTR1ETR-A3/A2-XX-IC	ST, FC, LC or SC	14	20	IC (1-slot)
1310/1550 SM (D)	OTS-1V2ATR1DTR1ETR-A2/A3D-XX-IC	OTS-1V2ATR1DTR1ETR-A3D/A2-XX-IC	ST, FC, LC or SC	21	40	IC (1-slot)
1270-1610 SM (CWDM)	OTS-1V2ATR1DTR1ETR-L4/L4-XX-IC	OTS-1V2ATR1DTR1ETR-L4/L4-XX-IC	ST, FC, LC or SC	Varies	20-70	IC (1-slot)
Non-Optical Version	OTS-1V2ATR1DTR1ETR-NOC-IC	OTS-1V2ATR1DTR1ETR-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

Composite Video, Audio & Data

Video

Standard	SMPTE 170M; 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)

Analog Audio

Level	6 dBm In/Out	Impedance Options::	
Bandwidth	20 Hz to 20 KHz	Input	Output
Signal to Noise Ratio	> 80 dB	Balanced 600 Ohm	Balanced 600 Ohm
Total Harmonic Distortion	< 0.1%	Balanced Hi-Z	Balanced Low-Z
Signal Coding	20-bit	Unbalanced Hi-Z	Unbalanced Low-Z
Connector	Micro DB25		

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

Ethernet

Standard	Ethernet IEEE 802.3
Data Rate	10/100 Mbps
Connector	RJ-45

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	

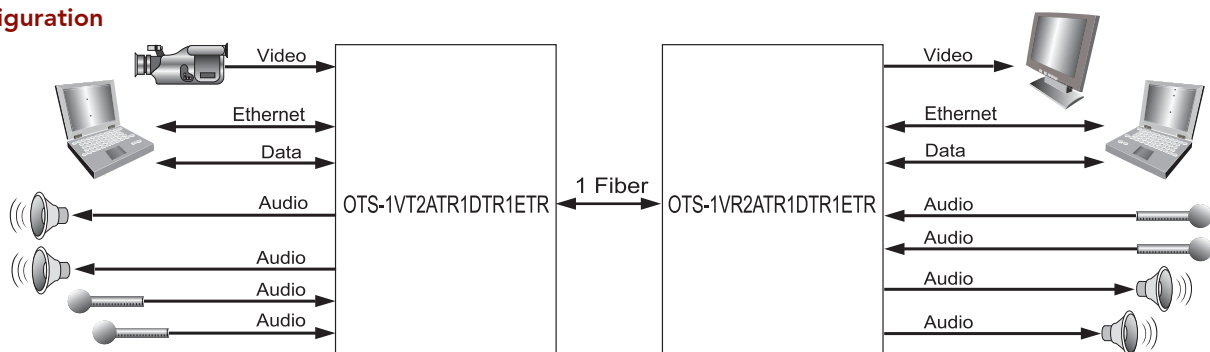
Local Monitoring

LED Status Indication

Remote Monitoring

Compatible with OptivaView™
SNMP Management Suite

Sample Configuration



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

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