

## Features

- SMPTE Compliant
- Composite Video over Fiber
- Singlemode Options (up to 70 km)
- Multimode Options (up to 3 km)
- Uses All-Digital Processing for Crystal Clear Picture with No Compression
- Real-Time Video Transmission for Exceptional Quality and Resolution
- TDM - Single Wavelength
- No EMI, RFI, or Ground Loops
- Compatible with MDM-7000 Series for CWDM Multiplexing
- 3-Year Warranty

## Applications

- High-Quality Video Security Systems
- Video Surveillance
- Train/Rail Station Camera Systems
- CCTV Applications
- Optical NTSC/PAL Video Switching

## Composite Video Transmission

The OTP-1V provides for the digital transmission of 1 channel of 12-Bit Composite Video, at broadcast quality.

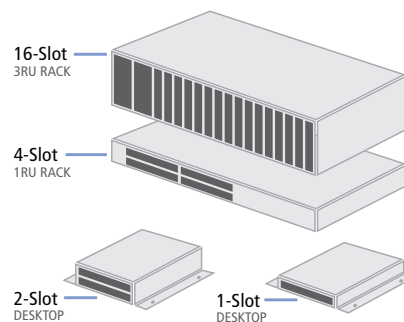
The OTP-1V is an excellent choice for transporting composite video signals over long or short distances over a single optical fiber. The system offers the complete flexibility needed for transporting fully digital composite video over one fiber. Additionally, the OTP-1V is part of the innovative Optiva Series Video, Audio and Data Media Transport System. New signals may be added or fully redundant optical transport solutions may be developed.

## System Design

Optiva insert cards support both 19" rack mount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosure (Model: OT-CC-16-100) can support up to 16 insert cards. It also supports dual-redundant, hot-swappable power supplies (Model: OT-CC-16-100-RPS) utilizing two PS-100 power supplies or two PS-200 power supplies (Model: OT-CC-16-200-RPS). Also available in the rackmount form factor is the four-slot (Model: OT-CC-4-1U) which houses four insert cards in 1RU of rack space. The compact one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures both use an external power supply (Model: PS-9012).



## Enclosure Options



**DATASHEET** **FIBER OPTICS**

## Models

Transmitter	Receiver
OTP-1VT-A0-XX	OTP-1VR-A0-XX
OTP-1VT-A1-XX	OTP-1VR-A1-XX
OTP-1VT-A2-XX	OTP-1VR-A2-XX
OTP-1VT-A2D-XX	OTP-1VR-A2D-XX
OTP-1VT-A3-XX	OTP-1VR-A3-XX
OTP-1VT-A3D-XX	OTP-1VR-A3D-XX
OTP-1VT-L4x1-XX	OTP-1VR-L4x1-XX
OTP-1VT-NOC	OTP-1VR-NOC

For ordering, please substitute "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.

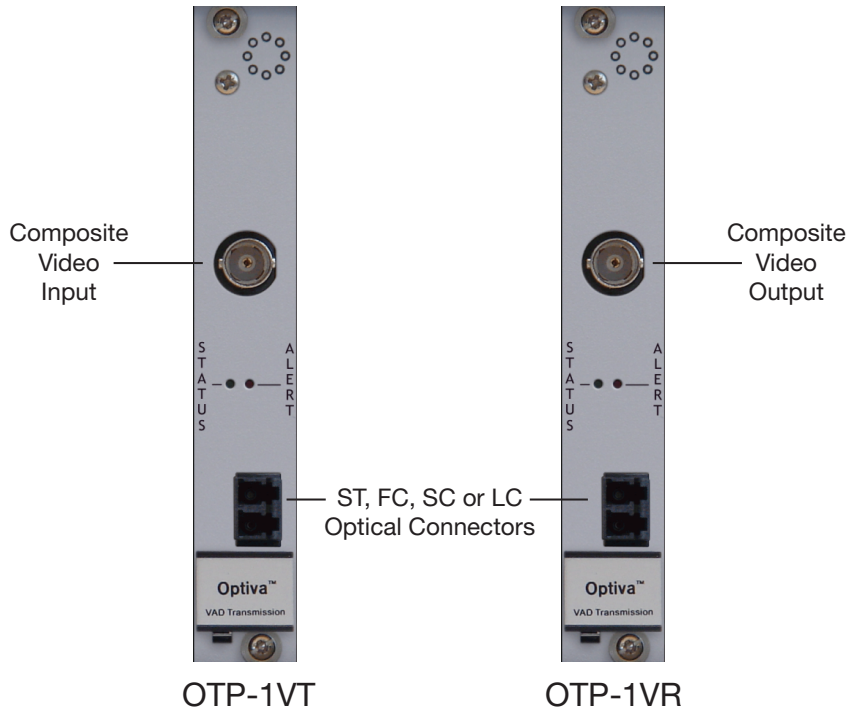
## Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
A0	Multimode	850 nm	5 dB	0.5 km
A1	Multimode	1310 nm	10 dB	3 km
A2	Singlemode	1310 nm	7 dB	10 km
A2D	Singlemode	1310 nm	14 dB	20 km
A3	Singlemode	1550 nm	17 dB	40 km
A3D	Singlemode	1550 nm	25 dB	60 km
L4x1	Singlemode	CWDM	Varies	20-70 km

Chromatic dispersion as well as other losses should also be taken into account

Stated distances are the maximum range, shorter distance may require attenuation

## Connection Diagram



## Video

Specifications	Values
Standards	SMPTE 170, 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°
Compatibility	NTSC, PAL, SECAM
Signal to Noise Ratio	> 67 dB
Connector	BNC (IEC 60169-8)

## General

Specifications	Values
Dimensions (Insert Card)	6.69" L x 0.81" W x 5.06" H
Weight	11 oz.
Operating Temperature	-20°C to +55°C
Storage Temperature	-40°C to +85°C
Humidity	0 to 95% Non-Condensing
Operating Voltage	12 VDC
Power Consumption	6 Watts
BER	10 <sup>-14</sup>
System Latency	< 1 ms
Warranty	3 year

## Monitoring & Control

Specifications	Values
Local	Front panel LED status and alert indicators
Remote	OptivaView SNMP Management Suite*

\* Requires OptivaView SNMP Controller Card (Model: OPV-CTLR)

## Compliance

