

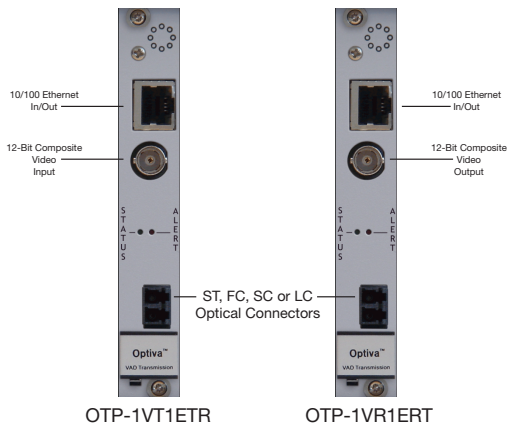
# OTP-1V1ETR

12-Bit Composite Video and 10/100 Ethernet



## DATASHEET

## FIBER OPTICS



### Composite Video & Ethernet Transmission

The OTP-1V1ETR provides for the digital transmission of 1 channel of Composite Video and 1 channel of Duplex 10/100 Ethernet, at broadcast quality.

The OTP-1V1ETR is an excellent choice for transporting composite video and ethernet 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-1V1ETR 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.

### Features

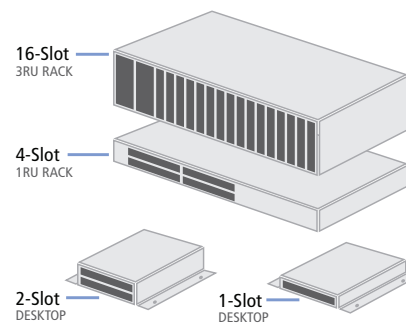
- SMPTE Compliant
- Composite Video over Fiber
- Duplex 10/100 Ethernet over Fiber
- Singlemode Options (up to 60 km)
- Multimode Options (up to 2 km)
- Uses All-Digital Processing for Crystal Clear Picture with No Compression
- Real-Time Video Transmission for Exceptional Quality and Resolution
- TDM - Single Wavelength
- No EMI, RFI, or Ground Loops
- Compatible with MDM-7000 Series for CWDM Multiplexing
- 3-Year Warranty
- ROHS Compliant

### 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



### Applications

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

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### Models

Transmitter	Receiver
OTP-1VT1ETR-A1/A3M-XX	OTP-1VR1ERT-A3M/A1-XX
OTP-1VT1ETR-A2/A3-XX	OTP-1VR1ERT-A3/A2-XX
OTP-1VT1ETR-A2/A3D-XX	OTP-1VR1ERT-A3D/A2-XX
OTP-1VT1ETR-A2/A3H-XX	OTP-1VR1ERT-A3H/A2-XX
OTP-1VT1ETR-L4x1-XX	OTP-1VR1ERT-L4x1-XX
OTP-1VT1ETR-NOC	OTP-1VR1ERT-NOC

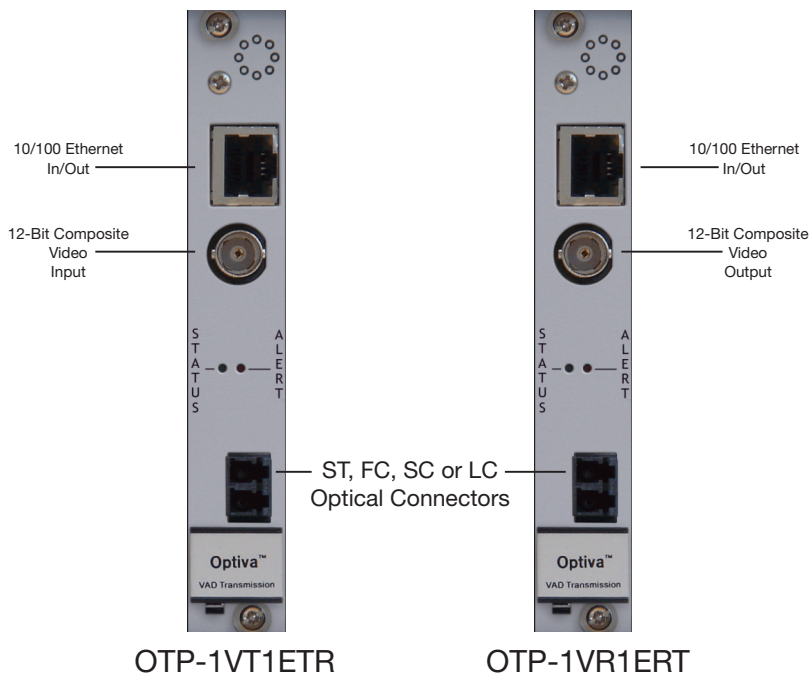
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

### Optical Specifications

Ordering Code	Wavelength & Fiber Type	Optical Budget (dB)	Range (km)	Output Power (dBm)	RX Overload	Typical RX Sensitivity
A1/A3M	1310/1550 Multimode	5	3	-5.5 to 0.5	0	-17
A2/A3	1310/1550 Singlemode	12	20	-5.5 to 0.5	0	-18
A2/A3D	1310/1550 Singlemode	17	40	-3.5 to 1.5	0	-21
A2/A3H	1310/1550 Singlemode	25	60	-2.5 to 2.5	-8	-28

- 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)

### Ethernet

Specifications	Values
Standard	Ethernet IEEE 802.3
Data Rate	10/100 Mbps (auto negotiation)
Connector	RJ-45

### 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
Bit Error Rate	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

