

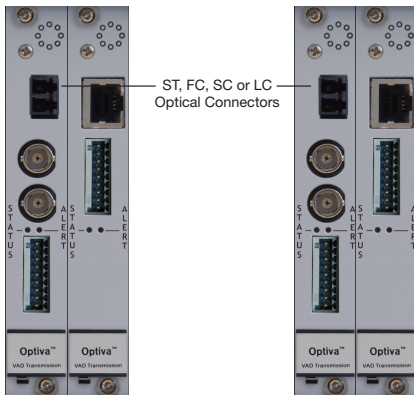
# OTP-2V4BATR1ETR

12-Bit Composite Video, Analog Audio and 10/100 Ethernet



## DATASHEET

## FIBER OPTICS



OTP-2V4BATR1ETR

OTP-2VR4BART1ETR

## Features

- SMPTE Compliant
- 12-Bit Composite Video over Fiber
- Analog Audio over Fiber (Terminal Block)
- 10/100 Ethernet over Fiber
- Singlemode Options (up to 60 km)
- Multimode Options (up to 2 km)
- 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, Analog Audio and Ethernet Transmission

The OTP-2V4BATR1ETR provides for the digital transmission of 2 channels of 12-Bit Composite Video, 4 duplex channels of Analog Audio and 1 duplex channel of 10/100 Ethernet, at broadcast quality.

The OTP-2V4BATR1ETR is an excellent choice for transporting composite video, analog audio 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, analog audio and ethernet over one fiber. In addition, the OTP-2V4BATR1ETR 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.

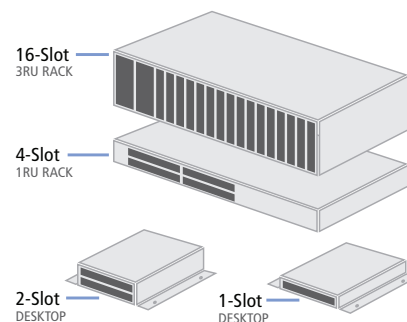
## System Design

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



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## DATASHEET FIBER OPTICS

### Models

Transmitter	Receiver
OTP-2VT4BATR1ETR-A0-XX	OTP-2VR4BART1ERT-A0-XX
OTP-2VT4BATR1ETR-A1-XX	OTP-2VR4BART1ERT-A1-XX
OTP-2VT4BATR1ETR-A2-XX	OTP-2VR4BART1ERT-A2-XX
OTP-2VT4BATR1ETR-A2D-XX	OTP-2VR4BART1ERT-A2D-XX
OTP-2VT4BATR1ETR-A3-XX	OTP-2VR4BART1ERT-A3-XX
OTP-2VT4BATR1ETR-A3D-XX	OTP-2VR4BART1ERT-A3D-XX
OTP-2VT4BATR1ETR-L4x1-XX	OTP-2VR4BART1ERT-L4x1-XX
OTP-2VT4BATR1ETR-NOC	OTP-2VR4BART1ERT-NOC

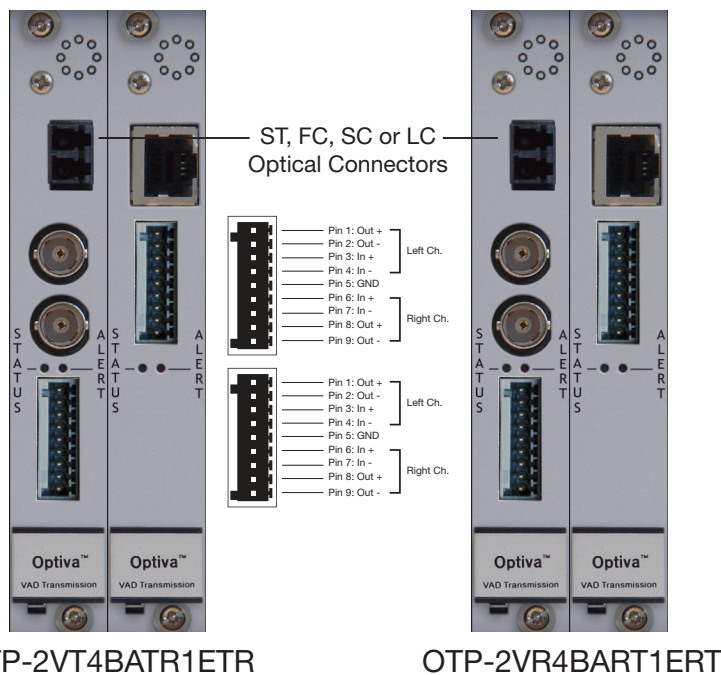
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

### Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
A0	Multimode	850 nm	5 dB	0.5 km
A1	Multimode	1310 nm	7 dB	2 km
A2	Singlemode	1310 nm	5 dB	10 km
A2D	Singlemode	1310 nm	12 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)

### Audio

Specifications	Values
Level	18 dBm In/Out
Bandwidth	20 Hz to 20 KHz
Signal to Noise Ratio	> 80 dB
Total Harmonic Distortion	< 0.1%
Signal Coding	24-bit
Connector	Terminal Block (See Pinout)

### 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

### Compliance

