



Features

- SMPTE Compliant
- Composite Video over Fiber
- Analog Audio over Fiber using Terminal Block
- Singlemode Options (up to 60 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
- ROHS Compliant

Applications

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

Composite Video and Analog Audio Transmission

The OTP-1V1BA provides for the digital transmission over fiber of 1 channel of 12-Bit Composite Video and 1 channel of Analog Audio (Terminal Block), at broadcast quality.

The OTP-1V1BA is an excellent choice for transporting composite video and analog audio signals over long or short distances over a single optical fiber. The system offers the complete flexibility needed for transporting fully digital composite video and analog audio over one fiber.

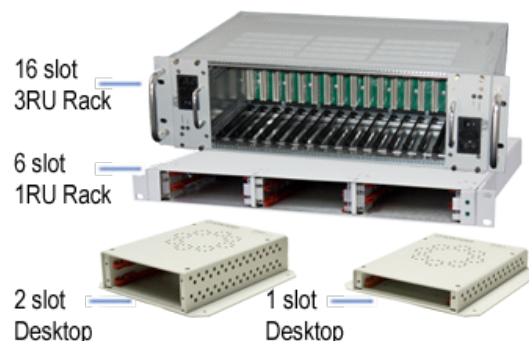
In addition, the OTP-1V1BA is part of our innovative Optiva video, audio and data media transport system. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology.

System Design

Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. Also available in the rackmount form factor is our 1RU enclosure (Model: OT-CC-6-1U) which can accommodate six insert cards and utilizes two 60 watt power supplies. For desktop or wall mounting applications there are one-slot (Model: OT-DTCR-1) and two-slot (Model: OT-DTCR-2) enclosures. Both use an external wall mount power supply.

optiva PLATFORM

Enclosure Options



OTP-1V1BA

Composite Video and Analog Audio

DATASHEET FIBER OPTICS

Models

Transmitter	Receiver
OTP-1VT1BAT-A0-XX	OTP-1VR1BAR-A0-XX
OTP-1VT1BAT-A1-XX	OTP-1VR1BAR-A1-XX
OTP-1VT1BAT-A2-XX	OTP-1VR1BAR-A2-XX
OTP-1VT1BAT-A2D-XX	OTP-1VR1BAR-A2D-XX
OTP-1VT1BAT-A3-XX	OTP-1VR1BAR-A3-XX
OTP-1VT1BAT-A3D-XX	OTP-1VR1BAR-A3D-XX
OTP-1VT1BAT-L4x1-XX	OTP-1VR1BAR-L4x1-XX
OTP-1VT1BAT-NOC	OTP-1VR1BAR-NOC

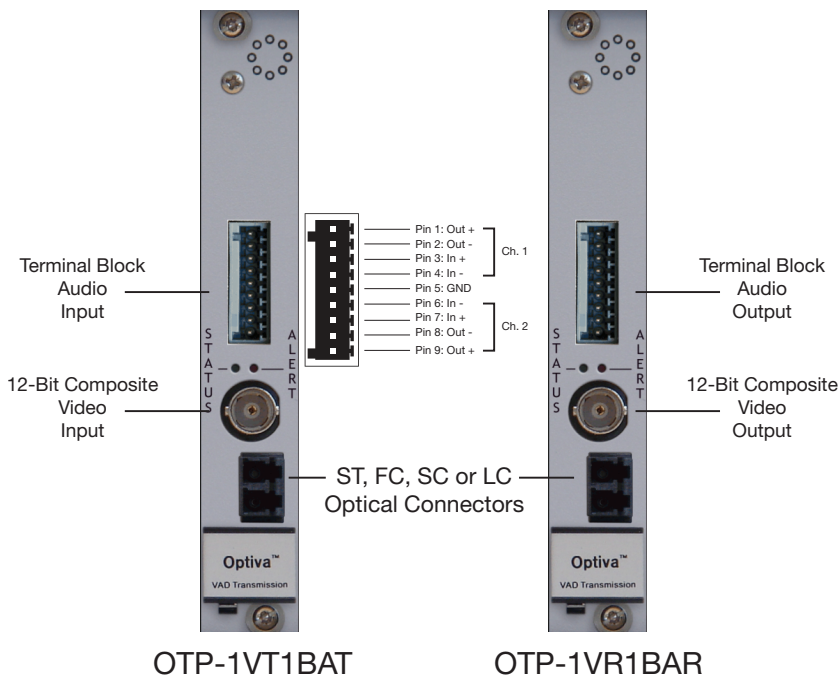
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

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

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 ⁻¹⁴
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

