

# OTP-8BA

Simplex or Duplex Analog Audio

## DATASHEET FIBER OPTICS



### Analog Audio Transmission over Fiber

The Optiva OTP-8BA provides for the transmission of 8 channels of analog audio, over long or short distances, using a single fiber.

In addition, the OTP-8BA is part of our innovative Optiva video, audio and data media transport system. Optiva was designed to maintain lossless fiber extension between input and output signals. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology. The Optiva line of products also includes insert cards for up to 16 channels of multiplexing / demultiplexing, 16x16 matrix switching, optical add / drop, as well as remote system monitoring.

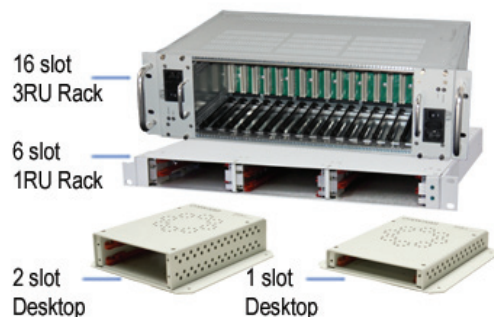
### Features

- Analog Audio over Fiber (Terminal Block Connection)
- Multimode Options (up to 3 km)
- Singlemode Options (up to 70 km)
- TDM - Single Wavelength
- No EMI, RFI, or Ground Loops
- 3-Year Warranty

### Applications

- Intelligent Transportation Systems
- Security & Surveillance
- Access Control
- Theater & Stadium Sound Systems

### Enclosure Options

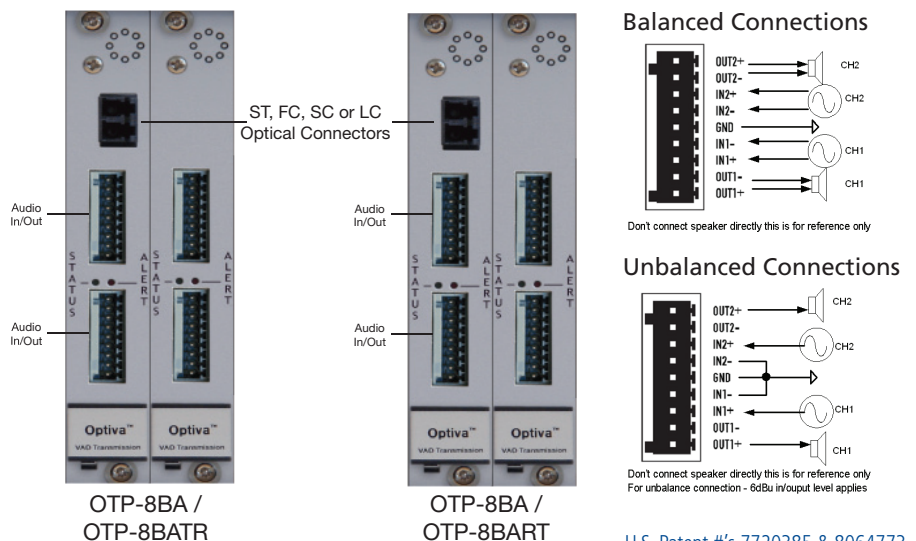


### System Design

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.



### Connection Diagram



U.S. Patent #'s 7720385 & 8064773

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### Simplex Models & Optical Specifications

Transmitter	Receiver
OTP-8BAT-XX-YY	OTP-8BAR-XX-YY
OTP-8BAT-L4x1-YY	OTP-8BAR-L4x1-YY
OTP-8BAT-NOC	OTP-8BAR-NOC

Optical Code "XX"	Fiber Type / Number	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (db)	Distance (km)	Connector Options "YY"
A0	MM/1	850	-10	-17	7	0.5	LC, SC, ST, FC
A1	MM/1	1310	-5.5	-10.5	5	2	LC, SC, ST, FC
A2	SM/1	1310	-5.5	-12.5	7	10	LC, SC, ST, FC
A2D	SM/1	1310	-5.5	-17.5	12	20	LC, SC, ST, FC
A3	SM/1	1550	-3.5	-20.5	17	40	LC, SC, ST, FC
A3D	SM/1	1550	0	-25	25	60	LC, SC, ST, FC
L4x1	SM/1	1270 to 1610 (CWDM)	-2.5	-27.5	25	50 to 70	LC, SC, ST, FC

- When ordering replace "XX" or "XXX" with one of the Optical Codes
- When ordering replace "YY" with one of the Connector Options
- When ordering CWDM, replace "x" in the Optical Code L4x1 with A (1270 nm), B (1290 nm), C (1310 nm), D (1330 nm), E (1350 nm), F (1370 nm), G (1390 nm), H (1410 nm), I (1430 nm), J (1450 nm), K (1470 nm), L (1490 nm), M (1510 nm), N (1530 nm), O (1550 nm), P (1570 nm), Q (1590 nm) or R (1610 nm)
- NOC: non-optical card
- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attenuation
- Standard connection type is UPC

### Duplex Models & Optical Specifications

Transmitter	Receiver
OTP-8BATR-XX/XX-YY	OTP-8BART-XX/XX-YY
OTP-8BATR-L4x1/L4x1-YY	OTP-8BART-L4x1/L4x1-YY
OTP-8BATR-NOC	OTP-8BART-NOC

Optical Code "XXX"	Fiber Type / Number	Wavelength (nm)	Min. Output Power (dBm)	Rx Sensitivity (dBm)	Optical Budget (db)	Distance (km)	Connector Options "YY"
A0/A0	MM/2	850	-10	-17	7	0.5	LC (Dual)
A1/A1	MM/2	1310	-5.5	-10.5	5	2	LC (Dual)
A2/A2	SM/2	1310	-5.5	-12.5	7	10	LC (Dual)
A2D/A2D	SM/2	1310	-5.5	-17.5	12	20	LC (Dual)
A3/A3	SM/2	1550	-3.5	-20.5	17	40	LC (Dual)
A3D/A3D	SM/2	1550	0	-25	25	60	LC (Dual)
L4x1/L4x1*	SM/2	1270 to 1610 (CWDM)	-2.5	-27.5	25	50 to 70	LC (Dual)
A1/A3M*	MM/1	1310/1550	-5.5	-10.5	5	3	SC, FC or ST
A2/A3*	SM/1	1310/1550	-5.5	-17.5	12	20	SC, FC or ST
A2/A3D*	SM/1	1310/1550	-3.5	-20.5	17	40	SC, FC or ST
A2/A3H*	SM/1	1310/1550	-2.5	-27.5	25	60	SC, FC or ST

- \*Use "XX/XX" as is for ordering transmitter models but reverse for ordering receiver models

### 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

### Audio

Specifications	Values
Level	18 dBu 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

Impedance	
Input	Output
Balanced (600 Ω or Hi-Z)	Balanced (600 Ω or Hi-Z)
Unbalanced (Hi-Z)	Unbalanced (Low-Z)

- Balanced Hi-Z option must be specified when placing order
- Unbalanced audio reduces audio level by approximately 50%

### Monitoring & Control

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

- Requires OptivaView SNMP Controller Card (Model: OPV-CTRL)

### Compliance

