OTP-1HD1LB2DA

HD-SDI Video w/Loopback and Digital Audio

DATASHEET FIBER OPTICS

Features

- SMPTE 292 & 259 Compliant
- Uncompressed HD-SDI Video over Fiber
- Stereo Digital Audio 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
- 3-Year Warranty
- ROHS Compliant

Applications

- Remote OB Van/Truck Video Feeds
- Broadcast Studio Camera Feeds
- SD Routing (Requires Optilinx Optical Switch)
- Long-Haul Signal Transport
- Lecture Hall Projector Connectivity
- Medical / Surgical Room Broadcast

HD-SDI Video and Digital Audio Transmission

The Optiva OTP-1HD1LB2DA provides for the transmission of 1 channel of uncompressed HD-SDI video with loopback and 2 channels of stereo digital audio (AES3), over long or short distances, using a single fiber.

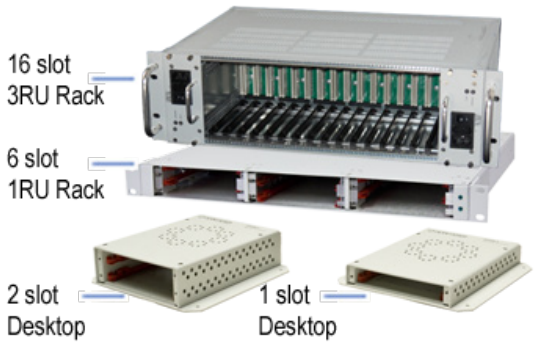
In addition, the OTP-1HD1LB2DA is part of our innovative Optiva video, audio and data media transport system. Optiva was designed to maintain lossless fiber extension between input and output signals. New signals may be added without the need for additional fiber through our proprietary daisy-chain technology. 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.

System Design

optiva PLATFORM

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 accomodate 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.

Enclosure Options



U.S. Patent #'s 7720385 & 8064773

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DATASHEET FIBER OPTICS

Models

Transmitter	Receiver
OTP-1HDT1LBT2DAT-B0-XX	OTP-1HDR1LBR2DAR-B0-XX
OTP-1HDT1LBT2DAT-B1-XX	OTP-1HDR1LBR2DAR-B1-XX
OTP-1HDT1LBT2DAT-B2-XX	OTP-1HDR1LBR2DAR-B2-XX
OTP-1HDT1LBT2DAT-B2D-XX	OTP-1HDR1LBR2DAR-B2D-XX
OTP-1HDT1LBT2DAT-B3-XX	OTP-1HDR1LBR2DAR-B3-XX
OTP-1HDT1LBT2DAT-B3D-XX	OTP-1HDR1LBR2DAR-B3D-XX
OTP-1HDT1LBT2DAT-L4x2-XX	OTP-1HDR1LBR2DAR-L4x2-XX
OTP-1HDT1LBT2DAT-NOC	OTP-1HDR1LBR2DAR-NOC

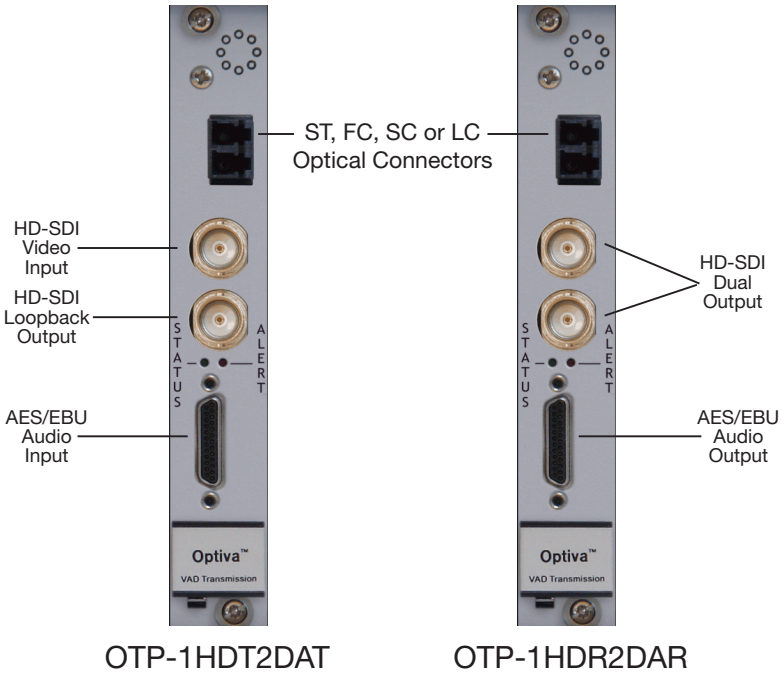
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
B0	Multimode	850 nm	7 dB	0.5 km
B1	Multimode	1310 nm	5 dB	2 km
B2	Singlemode	1310 nm	7 dB	10 km
B2D	Singlemode	1310 nm	12 dB	20 km
B3	Singlemode	1550 nm	17 dB	40 km
B3D	Singlemode	1550 nm	25 dB	60 km
L4x2	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 attentuation

Connection Diagram



Video

Specifications	Values
Standards	SMPTE 292 & 259
Pathological Test Code	RP-178
Nominal Bit Rate	1.485 Gbps; 270 Mbps
Bit Error Rate	10^{-14}
Connector	BNC (IEC 60169-8; Gold Plated)

Audio

Specifications	Values
Digital Format	AES3-1992 (ANSI S4,40) SMPTE 276M
Connector	Micro DB25

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

239267

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