



Features

- SMPTE Compliant
- Uncompressed HD-SDI Video over Fiber
- Singlemode Options (up to 60 km)
- Multimode Options (up to 2 km)
- 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

Applications

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

HD-SDI Video Transmission

The OTP-1HD provides for the digital transmission of 1 channel of uncompressed HD-SDI Video with Loopback, at broadcast quality.

The OTP-1HD offers the complete flexibility needed to transport fully uncompressed HD-SDI over a single optical fiber. The system is an excellent choice for transporting SMPTE 292M compliant video signals over long or short distances with one fiber. In addition, the OTP-1HD is part of our Optiva Platform 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).

optiva | PLATFORM

DATASHEET **FIBER OPTICS**

Models

Transmitter	Receiver
OTP-1HDT-B0-XX	OTP-1HDR-B0-XX
OTP-1HDT-B1-XX	OTP-1HDR-B1-XX
OTP-1HDT-B2-XX	OTP-1HDR-B2-XX
OTP-1HDT-B2D-XX	OTP-1HDR-B2D-XX
OTP-1HDT-B3-XX	OTP-1HDR-B3-XX
OTP-1HDT-B3D-XX	OTP-1HDR-B3D-XX
OTP-1HDT-L4x2-XX	OTP-1HDR-L4x2-XX
OTP-1HDT-NOC	OTP-1HDR-NOC

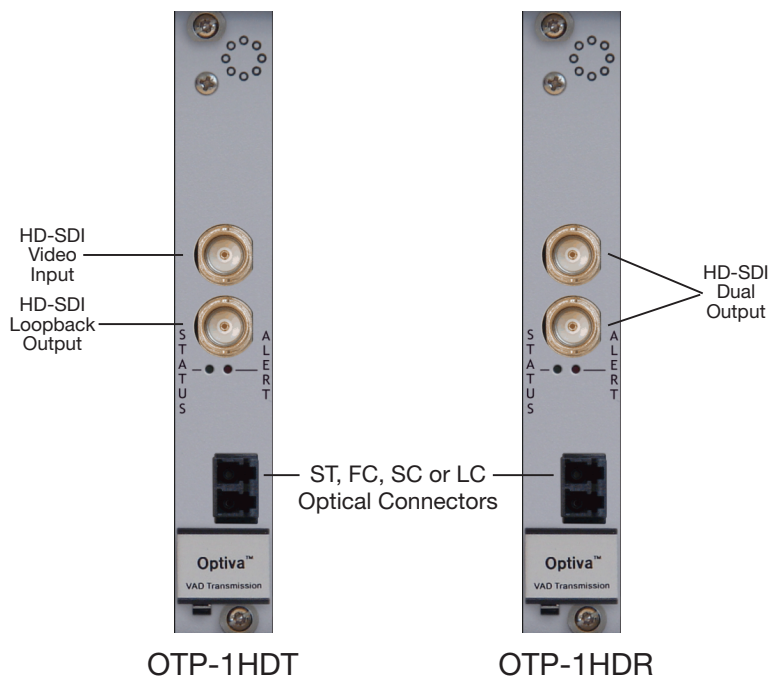
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
B0	Multimode	850 nm	7 dB	0.3 km
B1	Multimode	1310 nm	5 dB	1 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 attenuation

Connection Diagram



Video

Specifications	Values
Standards	SMPT E 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)

General

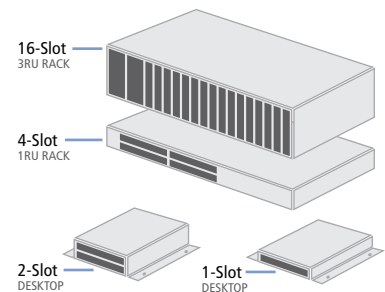
Specifications	Values
Dimensions (Insert Card)	6.69" L x 0.81" W x 5.06" H
Weight	11 oz.
Operating Temperature	-20°C to +55°C
Storage Temperature	-40°C to +85°C
Humidity	0 to 95% (Non-Condensing)
Operating Voltage	12 VDC
Power Consumption	6 Watts
Bit Error Rate	10 ⁻¹⁴
System Latency	< 1 ms
Warranty	3 Years

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)

Enclosure Options



Compliance

