

Optiva® SERIES Professional Media Transport



The OTP-1HDp is an excellent choice for transporting SMPTE 424M, 292M or 259M compliant video signals over long or short distances with a single optical wavelength. The system offers the complete flexibility needed for transporting full uncompressed (2.97 Gb/s) 1080p HD over optical fiber.

Additionally, the OTP-1HDp 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.



Switching and multicasting 3G-HD signals over optical fiber is quick and simple, by routing OTP-1HDp links through the Optilinx® Switching Platform, making this the perfect solution for Broadcast Studio HD Routing and Switching. The combination of Optiva® and Optilinx® facilitates flexibility for choice of video, audio, and data transport. With Optilinx®, cabling is done once to create a completely optical transport network. Combined with Optiva®, the system is flexible to transmit, switch or convert signals on custom optical mesh networks.

Features

- Supports uncompressed 3Gb/s HD-SDI signals
- SMPTE 424M, 292M, 259M Compliant
- Singlemode options (up to 20 km)
- Uses all-digital processing for crystal clear picture with no compression
- Real-time video transmission for exceptional quality and resolution
- Single output stream (2.97 Gb/s) with local loopback
- Receiver contains cable driver and reclocker per SMPTE 424M
- Transmitter contains cable driver, adaptive cable equalizer, and reclocker per SMPTE 424M

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

System Design

Optiva® insert cards support both 19" rack mount and compact table top or wall mountable enclosures. The 3RU 19" rack mount 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 4-slot (Model: OT-CC-4-1U) which houses 4 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).

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Models

Transmitter	Receiver
OTP-1HDPT-C2-XX-IC	OTP-1HDPR-C2-XX-IC
OTP-1HDPT-C2D-XX-IC	OTP-1HDPR-C2D-XX-IC

■ For ordering, please substitute "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.

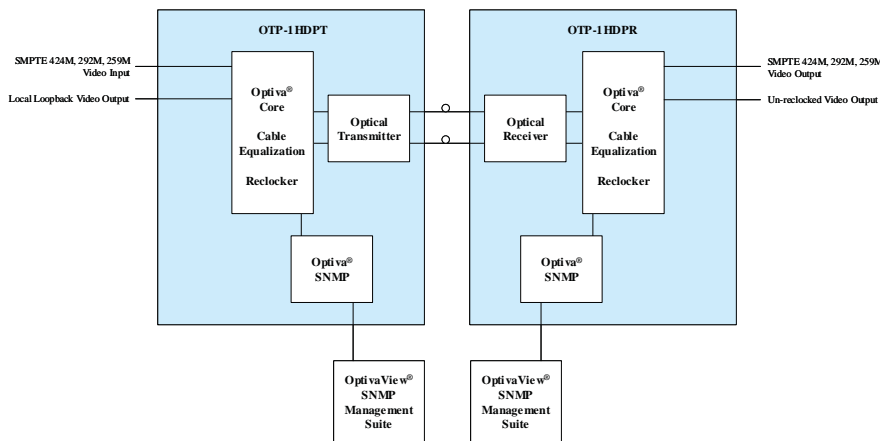
Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
C2	Singlemode	1310 nm	7 dB	10 Km
C2D	Singlemode	1310 nm (D)	12 dB	20 Km

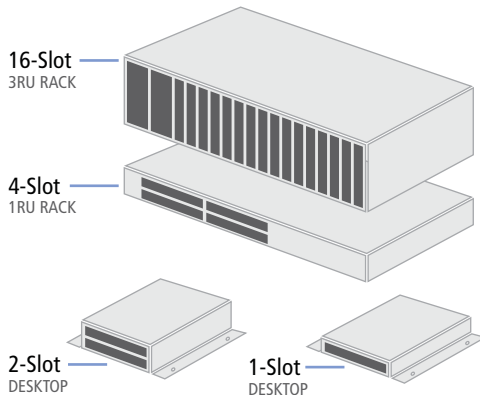
■ Chromatic dispersion as well as other losses should also be taken into account

■ Stated distances are the maximum range, shorter distances may require attenuation

Functional Diagram



Enclosure Options



Video

Specifications	Values
Standards	SMPTE 424M, 292M, 259M
Resolutions	2.97 Gbps; 1.485 Gbps; 270 Mbps
Connector	BNC (IEC 60169-8-Gold Plated)
Video Modes	480i/480p, 720p, 1080i/1080p
Max Resolution	1920 x 1080 @ 50/60 Hz
Pathological Test Code	RP-178

General

Specifications	Values
Dimensions (Insert Card)	6.3"D x 0.8"W x 4.0"H
Weight	11 oz.
Operating Temperature	0° to +70°C
Storage Temperature	-30°C to +85°C
Humidity	0 to 95% non-condensing
Power Consumption	6 Watts

Monitoring & Control

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