OTP-2HDP

3G HD-SDI VIDEO

opticomm | **emcore** empower with light

3G HD-SDI Video over Fiber

The Optiva OTP-2HDP provides for the transmission of 2 independent channels of uncompressed 3G HD-SDI video, over long or short distances, using a dual fiber.

In addition, our innovative Optiva video, audio and data media transport system was designed to maintain lossless fiber extension between input and output signals. New signals may be added to most products without the need for additional fiber through our proprietary daisy-chain technology, with the exception of DVI, 3G HD-SDI, GigE and USB. 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 insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19"

optiva PLATFORM

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.
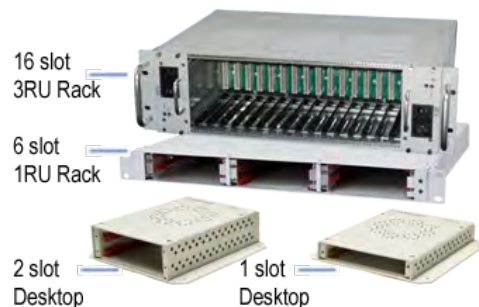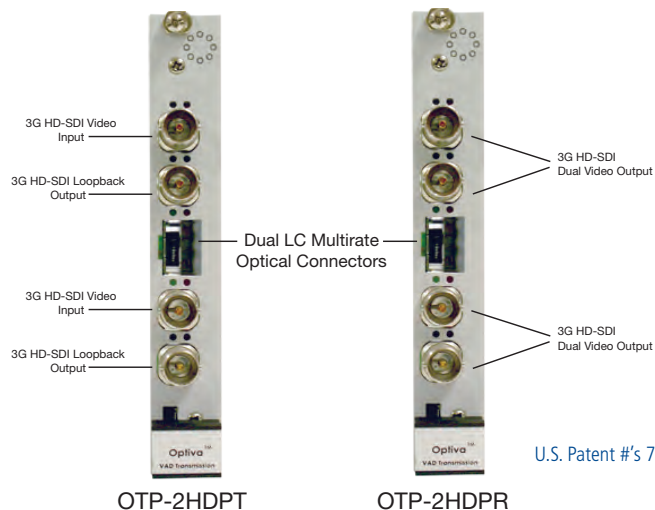
Features

- SMPTE 424M, 292M, 259M Compliant
- Singlemode and multimode options (up to 80 km)
- Bandwidth from 19 Mbps to 3 Gbps
- Supports ASI and SMPTE 310 transmission
- Two independent output streams (2 x 2.97 Gb/s) with local loopbacks
- Each card contains cable driver and reclocker per SMPTE 424M, Transmitter also includes adaptive cable equalizer

Applications

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

Enclosure Options

16 slot 3RU Rack
6 slot 1RU Rack
2 slot Desktop
1 slot Desktop

Connection Diagram

3G HD-SDI Video Input
3G HD-SDI Loopback Output
Dual LC Multirate Optical Connectors
3G HD-SDI Video Input
3G HD-SDI Loopback Output

3G HD-SDI Dual Video Output
3G HD-SDI Dual Video Output

OTP-2HDPT   OTP-2HDPR

U.S. Patent #'s 7720385 & 8064773

advanced media technologies

OTP-2HDP
3G HD-SDI Video

Models

Transmitter	Receiver
OTP-2HDPT-*XX/XX*-LC	OTP-2HDPR-*XX/XX*-LC

- When ordering replace "*XX/XX*" with one of the Optical Codes
- Optical budget for Transmitters and Tranceivers are based on receiver sensitivity
- Chromatic dispersion as well as other losses should also be taken into account
- Stated distances are the maximum range, shorter distance may require attentuation
- Standard connection type is UPC

Simplex Receiver Optical Specifications

Code	Fiber Type / Number	Wavelength (nm)	Distance (Km)	Output Power (dBm)	RX Sensitivity (dBm)	Optical Budget (db)
D5/D5	SM/2 or MM/2	1270 to 1610	-	-	-18	12
D6/D6	SM/2	1270 to 1610	-	-	-28	12

Simplex Transmitter Optical Specifications

Code	Fiber Type / Number	Wavelength (nm)	Distance (Km)	Output Power (dBm)	RX Sensitivity (dBm)	Optical Budget (db)
D1/D1	SM/2 or MM/2	1310	0.5	-5 to 0	-	13 to 23
D2/D2	SM/2 or MM/2	1310	10	-5 to 0	-	13 to 23
D2D/D2D	SM/2	1310	30 to 60	0 to 3	-	18 to 28
D3/D3	SM/2	1550	50 to 80	0 to 3	-	18 to 28
D4A/D4B	SM/2	1270/1290 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4C/D4D	SM/2	1310/1330 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4E/D4F	SM/2	1350/1370 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4G/D4H	SM/2	1390/1410 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4I/D4J	SM/2	1430/1450 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4K/D4L	SM/2	1470/1490 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4M/D4N	SM/2	1510/1530 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4O/D4P	SM/2	1550/1570 (CWDM)	30 to 80	-5 to 0	-	13 to 23
D4Q/D4R	SM/2	1590/1610 (CWDM)	30 to 80	-5 to 0	-	13 to 23

General

Specifications	Values
Dimensions (Insert Card)	6.3"D x 0.8"W x 4.0"H
Weight	11 oz.
Operating Temperature	-20° to +55°C
Storage Temperature	-30°C to +85°C
Humidity	0 to 95% non-condensing
Power Consumption	6.5 Watts

Video

Specifications	Values
Standards	SMPTE 424M, 292M, 259M, ASI and SMPTE 310
Data Rate	19 Mbps to 3 Gbps
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

Compatibility with Matrix Switches & SFP Port Card OMX-SFP-B-V

Specifications	Values
Matrix Switch Model	OMX-16, -32, -64, -144, -288
Data Rate	270 Mbps, 1.485 Gbps, 2.97 Gbps
Standard	SMPTE 297 Compliance
Interfaces per Port Card	SFP x 16

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

FC   CSR 239267   CE   MADE IN USA   RoHS COMPLIANT

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