

SDI Video Transmission

The Optiva OTP-7SD provides for the transmission of 7 channels of uncompressed SDI video, over long or short distances, using a single fiber.

In addition, the OTP-7SD 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

- SMPTE 259M Compliant
- Uncompressed SDI Video over Fiber
- Multimode Options (up to 1 km)
- Singlemode Options (up to 70 km)
- TDM - Single Wavelength
- No EMI, RFI, or Ground Loops
- 3-Year Warranty

System Design

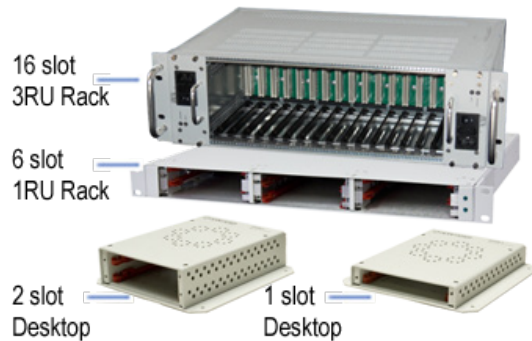
Optiva insert cards support both 19" rackmount and compact tabletop or wall-mountable enclosures. The 3RU 19" rackmount enclosures (Models: OT-CC-16 & OT-CC-16F) can support up to 16 insert cards as well as dual-redundant, hot-swappable power supplies utilizing two 100 watt or two 200 watt power supplies. 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.



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

Enclosure Options



U.S. Patent #'s 7720385 & 8064773

DATASHEET **FIBER OPTICS**

Models

Transmitter	Receiver
OTP-7SDT-B0-XX	OTP-7SDR-B0-XX
OTP-7SDT-B1-XX	OTP-7SDR-B1-XX
OTP-7SDT-B2-XX	OTP-7SDR-B2-XX
OTP-7SDT-B2D-XX	OTP-7SDR-B2D-XX
OTP-7SDT-B2H-XX	OTP-7SDT-B2H-XX
OTP-7SDT-B3-XX	OTP-7SDR-B3-XX
OTP-7SDT-B3D-XX	OTP-7SDR-B3D-XX
OTP-7SDT-L4x2-XX	OTP-7SDR-L4x2-XX
OTP-7SDT-NOC	OTP-7SDR-NOC

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

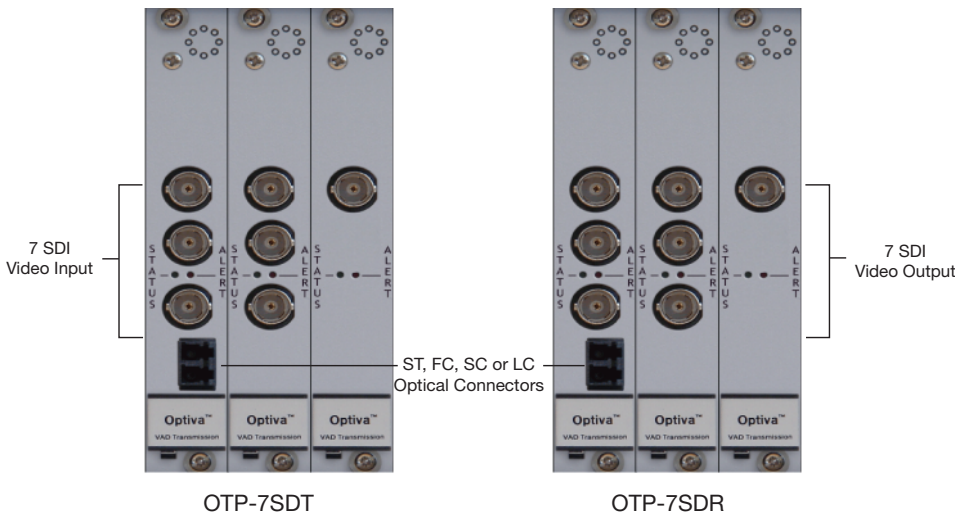
Optical Specifications

Code	Fiber Type	Wavelength	Optical Budget	Distance
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
B2H	Singlemode	1310 nm	25 dB	60 km
B3	Singlemode	1550 nm	17 dB	40 Km
B3D	Singlemode	1550 nm	25 dB	60 Km
L4x2	Singlemode	CWDM	25 dB	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
Standard	SMPTE 259M
Pathological Test Code	RP-178
Nominal Bit Rate	270 Mbps
Bit Error Rate	10 ⁻¹⁴
Connector	BNC (IEC 60169-8)

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

Monitoring & Control

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

Opticomm-EMCORE reserves the right to change specifications without prior notice.

Compliance

