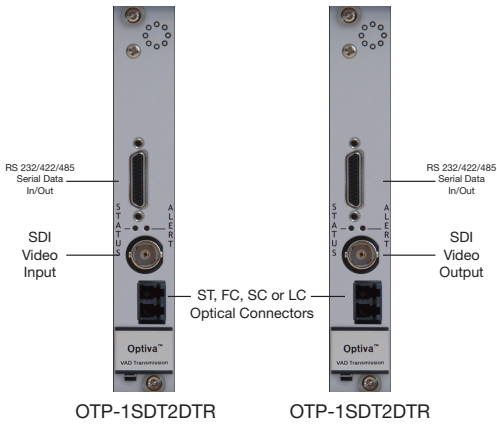


DATASHEET FIBER OPTICS



SDI Video and Serial Data Transmission

The OTP-1SD2DTR provides for the digital transmission of 1 channel of 270 Mbps uncompressed SDI Video and 2 channels of Duplex RS-232, RS-422 or RS-485 Serial Data, at broadcast quality.

The OTP-1SD2DTR is an excellent choice for transporting SMPTE 259M compliant video signals and serial data over long or short distances over a single optical fiber. The system offers the complete flexibility needed for transporting fully uncompressed SD-SDI video and serial data over optical fiber. In addition, the OTP-1SD2DTR 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.

Features

- SMPTE 259M Compliant
- Uncompressed SDI Video over Fiber
- Duplex Serial Data 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

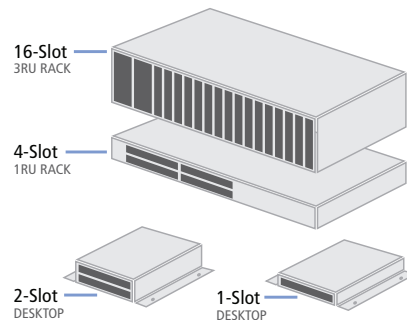
- Remote OB Van/Truck Video Feeds
- Broadcast Studio Camera Feeds
- SD Routing (Requires Optilinx Optical Switch)
- Long-Haul Signal Transport
- Lecture Hall Projector Connectivity
- Medical / Surgical Room Broadcast

System Design

Optiva insert cards support both 19" rack mount and compact 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).



Enclosure Options



DATASHEET FIBER OPTICS

Models

| Transmitter | Receiver |
|----------------------|----------------------|
| OTP-1SDT2DTR-A0-XX | OTP-1SDR2DRT-A0-XX |
| OTP-1SDT2DTR-A1-XX | OTP-1SDR2DRT-A1-XX |
| OTP-1SDT2DTR-A2-XX | OTP-1SDR2DRT-A2-XX |
| OTP-1SDT2DTR-A2D-XX | OTP-1SDR2DRT-A2D-XX |
| OTP-1SDT2DTR-A3-XX | OTP-1SDR2DRT-A3-XX |
| OTP-1SDT2DTR-A3D-XX | OTP-1SDR2DRT-A3D-XX |
| OTP-1SDT2DTR-L4x1-XX | OTP-1SDR2DRT-L4x1-XX |
| OTP-1SDT2DTR-NOC | OTP-1SDR2DRT-NOC |

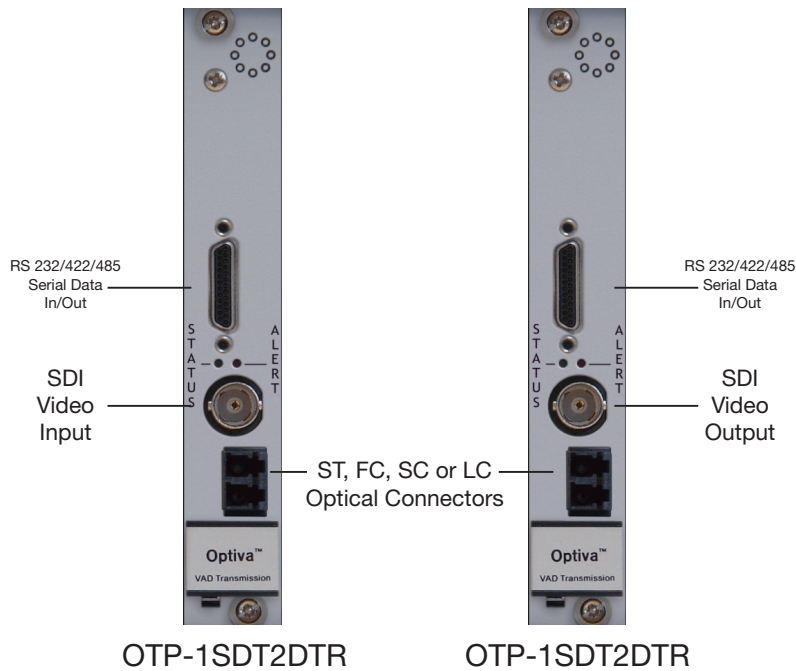
- When ordering, please substitute the "XX" in the model for one of the following optical connectors: ST, FC, SC, or LC.
- Standard SC connector type is UPC. APC is available upon request.

Optical Specifications

| Code | Fiber Type | Wavelength | Optical Budget | Distance |
|------|------------|------------|----------------|----------|
| A0 | Multimode | 850 nm | 7 dB | 0.5 Km |
| A1 | Multimode | 1310 nm | 10 dB | 2 Km |
| A2 | Singlemode | 1310 nm | 7 dB | 10 Km |
| A2D | Singlemode | 1310 nm | 12 dB | 20 Km |
| A3 | Singlemode | 1550 nm | 17 dB | 40 Km |
| A3D | Singlemode | 1550 nm | 25 dB | 60 Km |
| L4x1 | 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 |
|------------------------|-------------------|
| Standard | SMPTE 259M |
| Pathological Test Code | RP-178 |
| Nominal Bit Rate | 270 Mbps |
| Bit Error Rate | 10 ⁻¹⁴ |
| Connector | BNC (IEC 60169-8) |

Data

| Specifications | Values |
|--|----------------|
| Data Rate (RS-232) | DC to 200 Kbps |
| Data Rate (RS-422-2W, RS-485-2W & RS-485-4W) | DC to 1 Mbps |
| 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 |

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

