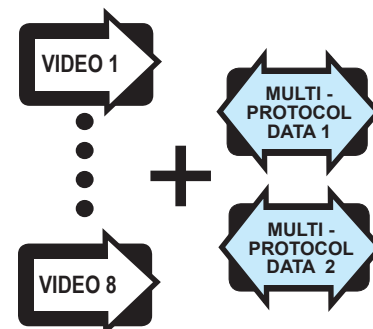


Digitally-Encoded 8-Channel 8-bit Video and 2 Bi-directional Multi-Protocol Data CWDM System



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 8 Real-Time Video and 2 Bi-directional Multi-Protocol Data Signals Over One Singlemode Optical Fiber
- 7 MHz Video Bandwidth
- 2 switch-selectable, multi-protocol data channels. Compatible with RS-232, RS-422, RS-485, Manchester, bi-phase
- Meets RS-250C Transmission Specifications
- NTSC, PAL, & SECAM Compatible
- Wide Optical Dynamic Range: Eliminates Need for Optical Attenuators
- Laser Based System for Multimode and Singlemode
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- SpectraSmart™ Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics
- ST, FC Optical Connector
- Hot Swappable Cards
- Laser Back - Biased Photo Detector Circuitry for Stable Optical Output Over Full Temperature Range.
- 75 Ohm BNC Video Connector (Gold Center Pin)
- DB 9 Type Connectors for Data

DESCRIPTION:

The DT/DR-8V2G/2G-CWDM series product incorporate new digital encoding technology. This fiber optic module transmits 8 channels of uncompressed 8-bit NTSC, PAL or SECAM video & two full-duplex channels of switch-selectable multi-protocol data (RS-232, RS-422 and RS-485 (2 or 4-wire) over one optical fiber. These data formats are also compatible with bi-phase & Manchester encoding schemes.

8-ch video mux/demux (one way video) and 2-ch multiprotocol data (bi-directional) on one SM fiber, using CWDM Consisting of:

(Transmit side)

- DT-8V-51 (transmit on 1550nm)
- DXA-2G-53/55 (Tx on 1530, Rx on 1550nm)
- CWDM-4M (4-ch CWDM mux)
- SR-2001/AS1

(Receive side)

- DR-8V-3 (8-ch video Rx, qty 2)
- DXB-2G-55/53 (Tx on 1550nm, Rx on 1530nm)
- CWDM-4M (4-ch CWDM mux)
- SR-2001/AS1

CONFIGURATIONS:

The DT/DR-8V2G/2G-CWDM product family is available as rack mount cards suitable for mounting in Meridian card chassis and utilizes 7 card slots. These products can be easily converted to a Standalone module with the SR-1500/S, Desk / Wall mount 7-slot chassis (87- 264 VAC). See SR-1500 brochure for further details.

SPECIFICATIONS:

Video

| | |
|--------------------|-------------------------------|
| Format | NTSC, PAL, SECAM |
| Voltage/Impedance | 1 Vp-p, 75 Ohm, 1.5 Vp-p max. |
| Bandwidth | 5 Hz to 6.8 MHz @ -3 dB |
| Differential Gain | <0.6% |
| Differential Phase | <0.3° |
| SNR | >60 dB weighted* |
| Return Loss | >30 dB |
| Field Tilt | <0.5% |

Data

| | |
|------------------------|------------------------|
| Formats | RS-485, RS-422, RS-232 |
| Data Rate RS-422 / 485 | DC to 1Mb/s |
| Data Rate RS-232 | DC to 125 Kb/s |
| Bit Error Rate | 10 ⁻⁹ * |

Connectors

| | |
|---------|------------------------------|
| Video | 75 Ohm BNC (Gold Center Pin) |
| Optical | ST, FC |
| Power | IEC (3- Prong) |

Quality

| | |
|------|---|
| MTBF | >100,000 hours @ Ground Fix 35oC per MIL217F |
|------|---|

Optical

| | |
|-----------|----------|
| Bandwidth | 1 GB / s |
|-----------|----------|

Power**

| | |
|--------|----------------|
| System | 87VAC ~ 264VAC |
|--------|----------------|

Indicators (LEDs)

| | |
|--------------|--------------------------------------|
| 2 - Green | Power On |
| 2 - Bi-color | TX Carrier/ Laser Over Current |
| 2 - Bi-color | RX Carrier - Present / Error |
| 2 - Bi-color | RX optical signal - Present / Absent |
| 8- Red | Sync. Present |
| 8 - Green | Video Present / Overload |
| 4 - Green | Data Present |

Physical

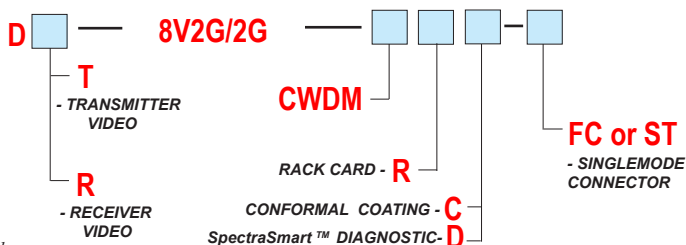
| | |
|------------|--|
| Dimensions | 19" L X 11" D, 5.25" H (483 mm,X 279 mm X 133mm) |
|------------|--|

| | |
|-------------------|------------------|
| Weight | <20 Lbs / 9.1 Kg |
| No. of Rack Slots | 12 |

Enviromental

| | |
|-----------------------|-------------------------|
| Operating Temperature | 0°C to +70°C |
| Storage Temperature | -55oC to +85oC |
| Relative Humidity | 0 to 95% Non-condensing |

Part Numbers:



* measured @ max. optical budget

** Due to variations of drivers and diagnostic options, power shown @ max value



Transmitter

FIBER



Receiver



OPTICAL:

| Fiber Type/Size (um) | Optical Output (dBm) | Receiver Sensitivity (dBm) | Optical Budget (dB) | Wavelength (nm) | Optical Connector | Optical Dynamic Range (dB) |
|------------------------------------|----------------------|----------------------------|---------------------|-----------------|-------------------|----------------------------|
| Singlemode (CWDM Laser) 9 / 125 | 0 | -22 | 22 | 1530 - 1550 | ST / FC | 22 |