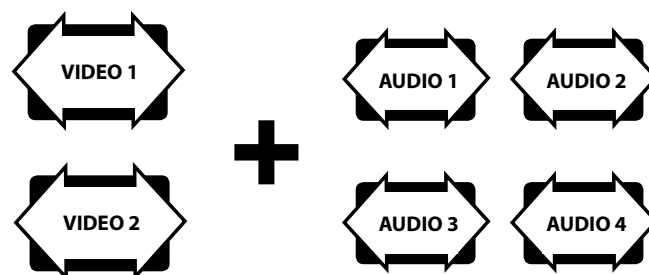




Digitally-Encoded Two Bi-directional 10-Bit Video Channels with Four Full-Duplex Audio Channels using Standard Small Form Pluggable (SFP) Optical Module



FEATURES

- Two Full-Duplex Real-Time 10-Bit Video Encoding
- Four Bidirectional Channels of 24 Bit Audio
- 7 MHz Video Bandwidth
- Meets RS-250C Short Haul Transmission Specifications
- NTSC, PAL, SECAM Compatible
- Multimode, Singlemode and CWDM, over one or two fibers via SFP modules
- Surface Mount Technology (SMT) for High Reliability and Repeatability
- *SpectraSmart™* Network Management Compatible
- Local LED Status Indicators to Monitor Critical System Diagnostics for Performance Parameters
- LC, SC Optical Connector (SFP dependent)
- Hot Swappable Cards
- 75 Ohm BNC Video Connector (Gold Center Pin)
- Meets EIA RS-170, RS-343A Formats
- DB 9 Type Connectors for Audio

DESCRIPTION

The DT/DR-2W4A/2W4A-SFP series products incorporate digital encoding technology. This fiber optic module transmits Two Real-time, Bi-directional High Performance 10-Bit Video signals and Four Full-duplex channels of 24 Bit Audio using the industry standard Small Form Pluggable (SFP) optical module. SFP gives you the selection of either singlemode, multimode or CWDM wavelength by simply plugging in the appropriate SFP module.

Both Multimode and Singlemode fiber versions are available. Meridian's digital product line incorporates plug-in personality signal cards to easily configure a wide variety of module types. The functionality of the DT/DR-2W4A/2W4A-SFP series products is enhanced by their compatibility with Meridian's PC based SpectraSmart Network Management & Diagnostic Software system. Spectra Smart supervises the operating parameters of the transmission system such as the status on Video levels, Sync, Digital carrier detect, Voltages, Temperatures, Optical levels etc. See Spectra Smart brochure for further details.

CONFIGURATIONS

The DigiFlex family products are available as rack mount cards and can be installed in Meridian's card chassis, desk chassis or 19" racking frames. This system can be configured in either star (module to rack) or trunking (rack to rack) configurations. These systems can be made a standalone system by using the SR-1000/s, 2 slot desk / wall mount chassis (87VAC-264VAC).

MARKETS

- ✓ Pro Video
- ✓ Distance Learning
- ✓ Editing Studios
- ✓ Tele-Conferencing

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 | >67 dB (weighted)* |
| Return Loss | >30 dB |
| Field Tilt | < 0.5% |

Audio

| | |
|---------------------------|---|
| In/Out Impedance | 600 Ohms (Bal. / Un Bal.) |
| Frequenct Response | 10Hz to 20KHz |
| SNR | >90dB (Weighted) @ 1KHz. |
| In / Out Level | -6 to +6 dBm (4VP-Pmax.) (+18dBm available on Request) |
| Total Harmonic Distortion | < 0.01% @ 1 KHz |
| Resolution | 24 Bit |

Optical

| | |
|---------------------------|---------------|
| Fiber Data Rate | 1 Gb/s |
| Fiber Type and Wavelength | SFP dependent |

Connectors

| | |
|---------|------------------------------|
| Video | 75 Ohm BNC (Gold Center Pin) |
| Optical | LC, SC |
| Audio | DB9 Female |

Power **

| | |
|------|---------|
| Card | 8 Watts |
|------|---------|

Indicators (LEDs)

| | |
|--------------|--------------------------------------|
| 1 - Green | Power On |
| 1 - Bi-color | TX Carrier / Laser Over Current |
| 1 - Bi-color | RX Carrier - Present / Error |
| 1 - Bi-color | RX optical signal - Present / Absent |
| 2- Green | Sync. Present |
| 4- Bi-color | Video Present / Overload |
| 8- Red | Audio Overload |
| 8 - Green | Audio Present |

Physical

| | |
|--------------|---|
| Dimensions: | 44 (W) x 127 (D) x 160 (H) mm (1.7 x 5.0 x 6.3 inch) |
| Weight: | 450 gms (16 Oz) |
| Card | |
| No. of Slots | 2 |

Enviromental

| | |
|-----------------------|-------------------------|
| Operating Temperature | -34°C to +74°C |
| Storage Temperature | -55°C to +85°C |
| Relative Humidity | 0 to 95% Non-condensing |

Quality

| | |
|------|---|
| MTBF | >200,000 hours @ Ground Fix 35°C per MIL217F |
|------|---|

* measured @ max. optical budget

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

Part Number:

DX — 2W4A / 2W4A — SFP —

SYMMETRICAL
TRANSCIVER

C CONFORMAL
COATING
D SpectraSmart™
DIAGNOSTIC



SFP OPTIONS:

The SFP series products are available for both single-mode and multimode fiber applications and either one or two fiber versions. Recommended optical speed for this product is 1.25 Gb/s.

For more specifications on a SFP optical devices go to **SFP data sheet** or visit:

WWW.MERIDIAN-TECH.COM -> PRODUCTS -> ACCESSORIES -> SFP OPTICAL DEVICES