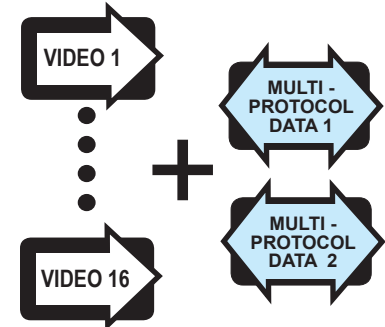


Digitally-Encoded 16-Channel 8-bit Video and 2 Bi-directional Multi-Protocol Data CWDM System



FEATURES:

- Standard 8 Bit Video Digital Encoding
- Transmits 16 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-16V2G/2G-CWDM series product incorporate new digital encoding technology. This fiber optic module transmits 16 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.

16-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)
- DT-8V-53 (transmit on 1530nm)
- DXA-2G-55/57 (Tx on 1550, Rx on 1570nm)
- CWDM-4M (4-ch CWDM mux)
- SR-2001/AS1

(Receive side)

- DR-8V-3 (8-ch video Rx, qty 2)
- DXB-2G-55/57 (Tx on 1570nm, Rx on 1550nm)
- CWDM-4M (4-ch CWDM mux)
- SR-2001/AS1

CONFIGURATIONS:

The DT/DR-16V2G/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
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Optical

Bandwidth	1 GB / s
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Power**

System	87VAC ~ 264VAC
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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
16- Red	Sync. Present
16 - Green	Video Present / Overload
4 - Green	Data Present

Physical

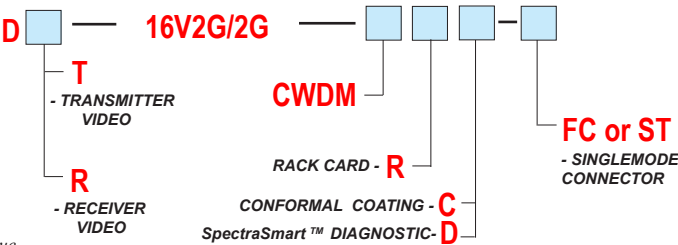
Dimensions	19" L X 11" D, 5.25" H (483 mm,X 279 mm X 133mm)
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Weight	<20 Lbs / 9.1 Kg
No. of Rack Slots	12

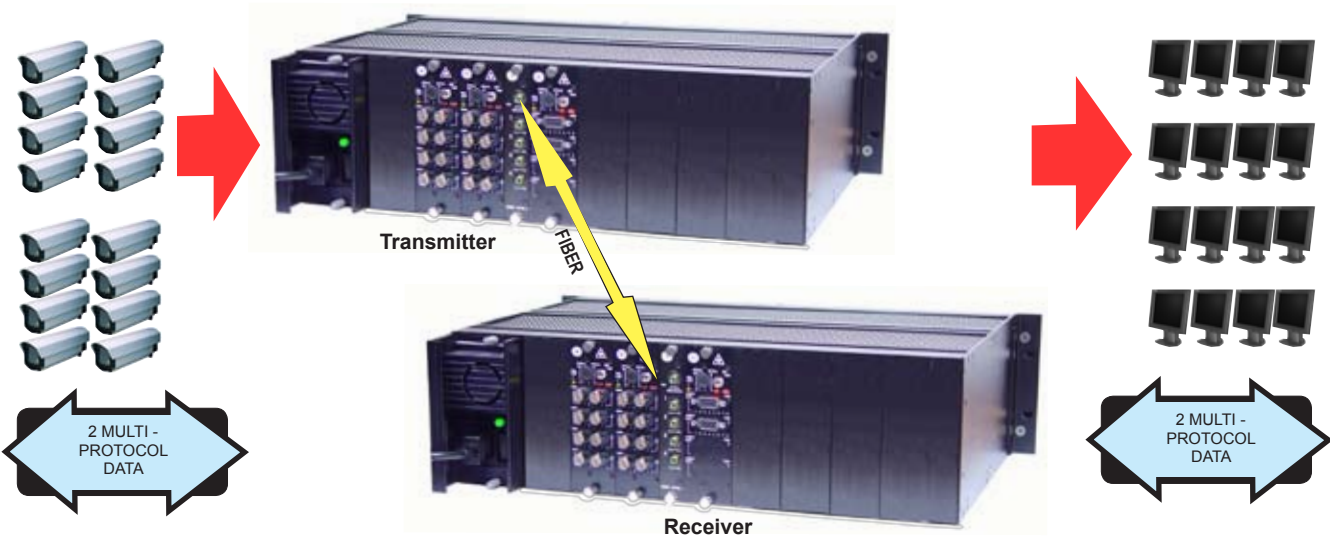
Enviromental

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



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	1510 - 1570	ST / FC	22