GE Security

Product Data Sheet

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9900VMPD

2-Channel to 10-Channel Video with Two-Way Multiprotocol Data

Overview

The 9900VMPD Video Multiplexers represent a technological breakthrough in the simultaneous transmission of multiple full-frame, real-time video signals (color or monochrome) over one or two single-mode optical fibers combined with two-way transmission of multiprotocol data.

Exceptional Performance

The 9900VMPD series features 6.5 MHz per channel bandwidth and optical automatic gain control (OAGC). The system accepts analog baseband input signals and converts them to digital format for transmission, assuring high-quality video output at the receiver. These systems are compatible with NTSC and PAL video formats and are compliant with various international EMC and laser safety standards.

Multiprotocol Data Support

Supported data formats include 3-wire and 5-wire RS-232, RS-422, 2-wire and 4-wire RS-485, TTL, Manchester, Biphase, and SensorNet.

Superior Diagnostics

The SMARTS™ diagnostic technology includes LEDs that monitor the status of the video, data, and optical signals.

Standard Features

- **One-way video and two-way data transmission over one or two single-mode fibers**
- **Digital multiplexing technology**
- **Supports NTSC and PAL video formats**
- **>520 TV lines resolution**
- **Video SNR >57 dB**
- **6.5 MHz video bandwidth per channel**
- **Supports multiprotocol data formats**
- **Field-selectable data format**
- **10 to 20 dB optical budget**
- **Color or monochrome video**
- **Optical AGC**
- **Built-in diagnostics**

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Specifications

Video
- Channels: 2 to 10 (additional channels available)
- Format: NTSC, PAL
- Input/Output Signal: 1.0 V p-p composite, minimum 200 mV sync.
- Bandwidth: 6.5 MHz per channel
- Signal-to-Noise Ratio: >57 dB
- Video Resolution: >520 TV lines
- Input/Output Impedance: 75 ohms
- Differential Phase: <2.5°
- Differential Gain: <3%

Data
- Channels: 1 duplex
- Formats: RS-232 (3-wire/5-wire), TTL, RS-422, RS-485 (2-wire/4-wire), Manchester, Biphase, SensorNet
- Baud Rate: 250 kbps to 512 kbps (depending on data format)
- Bit Error Rate: <1.0E-9

Optical
- Mode: Single Mode
- Wavelength, 1-Fiber Units: 1310 and 1550 nm
- Wavelength, 2-Fiber Units: 1310 nm or 1550 nm
- Emitter: Laser
- Optical Budget, 1-Fiber Units: 10 dB
- Optical Budget, 2-Fiber/1310 Units: 13 dB
- Optical Budget, 2-Fiber/1550 Units: 20 dB
- Operating Distance, 1-Fiber Units: 15 mi (25 km)
- Operating Distance, 2-Fiber/1310 nm Units: 20 mi (32 km)
- Operating Distance, 2-Fiber/1550 nm Units: 41 mi (66 km)
- Gain Control: Optical Automatic Gain Control (OAGC)

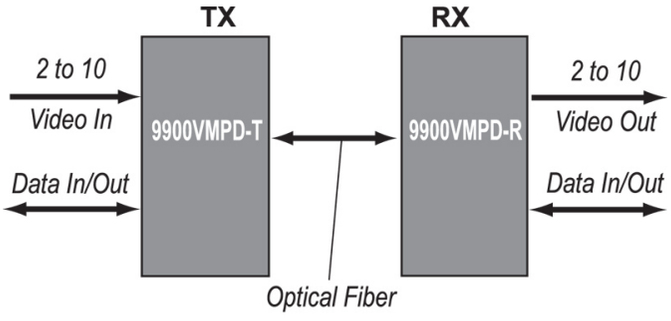
Electrical
- Power Supply: Model 613P (supplied with unit)
- Power Supply Input Voltage: 100 - 240 VAC, 60/50 Hz
- Power Supply Output Voltage: 13.5 VDC regulated
- Power Consumption: 50 W

Environmental
- Operating Temperature: -40 to 167 °F (-40 to 75 °C)
- Maximum Humidity: 95% relative, noncondensing

Standards
- Emmissions: FCC Part 15, ICES-003, AS/NZS 3548, EN55022
- Immunity: ENV50204, EN61000-4-2, -3, -4, -5, -6, -11
- Safety: UL 1950, CAN/CSA 22.2, NO. 950-95
- Laser Safety: 21CFR1040, EN60825-1, -2

Mechanical
- Dimensions (HWD): 1.72" x 19.0" x 11.7"
- Weight: Transmitter 5.47 lbs (2.49 kg); Receiver 5.16 (2.35 kg)
- Construction: Aluminum

Related Diagram



Ordering Information

Use the Configurator below to select the options available for this product.

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No. of Channels	No. of Fibers	Optical Wavelength	Product Type
02 - 10 (Use even channel numbers only)	1 1 Fiber 2 2 Fibers	Add L here only if ordering High Order Wavelength	T Transmitter R Receiver

Additional configurations, up to 72 channels, are available by special order.

GE Security

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IPS-9900VMPD-2004-06-17 01:22:42 Released : 30.04.2004