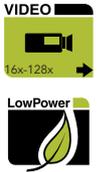


Features

- 16 to 128-channel single fiber, digital point-to-point video system
- Exceeds EIA RS-250C short haul specification
- 10-bit uncompressed video
- Advanced digital filtering
- No latency
- High reliability
- 19" rack-mount, including power supply



DVBus 8050 16 to 128-channel digital video

Description

The DVBus 8050 series digital video multiplexers and demultiplexers transmit and receive from 16 to 128 high quality video signals over one single-mode fiber. By using 10-bit digital encoding and decoding, oversampling and digital filtering, this system excels in video transmission performance, exceeding the requirements of the EIA RS-250C short haul specifications.

The DVBus 8050 is available for 16 to 128 video channels, in steps of eight. The units are delivered preassembled as N-channel transmitters or receivers, including power supply and 19" rack(s).

Installation and operation are easy as no electrical or optical adjustments are needed. LED indicators provide an instant overview of the system's status.

The wide operating temperature range of these units makes the DVBus 8050 system well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and federal and critical infrastructures.

Technical Specifications

DVBus 8050 16 to 128-channel digital video



16 to 128 Video

Video

| | |
|-----------------------|--|
| Number of channels | 16-128 |
| Video format | NTSC, PAL, SECAM |
| Input/Output level | 1 Vpp (± 3 dB) |
| DC restore (clamping) | On or off (selectable) |
| Bandwidth (-3 dB) | 6 MHz |
| Sampling resolution | 10-bit |
| Sampling rate | 27 Msamples/s, 2x over-sampled |
| Differential gain | <1% |
| Differential phase | <1° |
| Group delay | <10 ns |
| SNR | >67 dB (weighted) |
| Connector type | BNC 75 Ω (gold-plated center pin) |

Management

| | |
|-----------------------|---|
| LED status indicators | |
| DC | Power-on indicator (green) |
| SYNC | RX only: link synchronized (green), link down (red) |
| FR | TX only: Correct transmission framing (green), internal failure (red) |

Powering

| | | | | |
|---------------|----------------------|-------------------------|-------------------------|-----------------------------|
| Model | TX/RX-16, -24, -32 | TX/RX-40, -48, -56, -64 | TX/RX-72, -80, -88, -96 | TX/RX-104, -112, -120, -128 |
| Power | 1 MC 11/EB-2 rack | 2 MC 11/EB-2 racks | 3 MC 11/EB-2 racks | 4 MC 11/EB-2 racks |
| Mains voltage | 230Vac (115 Vac opt) | 230Vac (115 Vac opt) | 230Vac (115 Vac opt) | 230Vac (115 Vac opt) |

Environmental

| | |
|-----------------------|---|
| Operating temperature | -40° C to +74° C (-40° F to +165° F) |
| Storage temperature | -55° C to +85° C (-67° F to +185° F) |
| Relative humidity | <95% no condensation |
| MTBF | >100,000h |
| Safety & EMC | IEC/EN 60950, IEC/EN 60825, IEC/EN 61000, EN 50130-4, EN 50081-1, IEC/EN 55022, FCC part 15 |

Mechanical

| | |
|---------|-----------|
| Housing | 19" racks |
|---------|-----------|

Technical Specifications

DVBus 8050 16 to 128-channel digital video

Optical

| Optical | 8050-16, -24, -32 | 8050-16, -24, -32 | 8050-40...-64 | 8050-40...-64 | 8050-72...-128 |
|----------------------|-------------------|-------------------|---------------|----------------|----------------|
| | TX-RX | TX-RX/HS | TX-RX | TX-RX/HS | TX-RX |
| Fiber type | 1x SM | 1x SM | 1x SM | 1x SM | 1x SM |
| Optical return loss | >45 dB | >45 dB | >45 dB | >45 dB | >45 dB |
| System budget | 19 dB | 27 dB | 17 dB | 25 dB | 17 dB |
| Minimum Link Loss | 0 dB | 9 dB | 0 dB | 7 dB | 0 dB |
| CWDM insert. loss | 2 dB | 2 dB | 3 dB | 3 dB | 2 dB |
| Output power TX | 3 dBm | 3 dBm | 3 dBm | 3 dBm | 1 dBm |
| Input power range RX | -1 to -20 dBm | -10 to -28 dBm | -1 to -20 dBm | -10 to -28 dBm | -1 to -20 dBm |
| Output wavelength | 1510-1570 nm | 1510-1570 nm | 1470-1610 nm | 1470-1610 nm | 1270-1610 nm |
| Connector type | SC/APC | SC/APC | SC/APC | SC/APC | SC/APC |

Ordering Information

| Models | Description | Fiber Type |
|--------------------|--|------------|
| DVBus 8050 TX-N* | N-channel 10-bit digital video multiplexer | SM |
| DVBus 8050 RX-N | N-channel 10-bit digital video demultiplexer | SM |
| DVBus 8050 RX-N/HS | N-channel high-sensitivity video demultiplexer | SM |



The quality management system utilized in the development, production, sales, and support of this product is ISO 9001:2008 certified by LRQA.
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