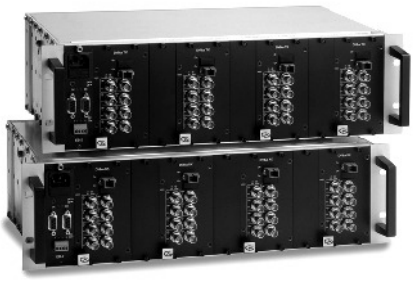
DVBus 8050

Features

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



Description

The DVBus 8050 series digital video multiplexers and demultiplexers transmit and receive from 16 up to 128 high-quality video signals over one single-mode fibre. 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 up 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.
Smart Network Management (SNM™) provides information about all transmission parameters.
The wide operating temperature range of these units makes the DVBus 8000 system extremely well suited for environmentally harsh applications, such as traffic monitoring, incident management, video surveillance in city centres, airport security, etc.

Ordering information

Model	Description	Fibre type	Budget	Housing	Managed
DVBus 8050 TX-N* DVBus 8050 RX-N	N-channel 10-bit digital video multiplexer N-channel 10-bit digital video demultiplexer	SM	19 dB	19"-rack	SNM
DVBus 8050 RX-N/HS	N-channel high-sensitivity digital video demultiplexer	SM	25 dB	19"-rack	SNM

*) N = 16, 24, 32, 40, 48, 56... up to 128.

Applications

16x Video — Video 16x — 128x Video — Video 128x

DVBus 8050

Technical Specifications

Video

Number of channels	16 up to 128
Video format	PAL/SECAM/NTSC
In-/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 oversampled
Group delay	< 10 ns
Differential gain	< 1%
Differential phase	< 1°
SNR	> 67 dB (weighted)
Connector type	BNC 75 (gold plated center-pin)

Powering	**TX/RX-16,-24,-32**	**TX/RX-40,-48,-56,-64**	**TX/RX-72, -80,-88,-96**	**TX/RX-104,-112,-120,-128**
Power	Single MC 11/EB-2 rack	Two MC 11/EB-2 racks	Three MC 11/EB-2 racks	Four MC 11/EB-2 racks
Mains voltage	230 Vac (115 Vac opt)	230 Vac (115 Vac opt)	230 Vac (115 Vac opt)	230 Vac (115 Vac opt)

Management

LED status indicators	
DC	Power-on indicator (green)
NV	No Video on in- or output (red)
SYNC	Full duplex link (green), local (red) or remote sync error (yellow)
Network Management	SNM™ compatible
SNM™ variables	Voltages, modules, module temperature, module status, optical levels etc.
Number of SNM interfaces	2x 9p sub-D per cabinet
Interface format	RS-485
Data rate	19.2 kb/s
Programmable contacts	2 per cabinet
Switch rating	2 A at 30 Vdc

Environmental

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

Mechanical

Housing	19-inch racks

Optical	8050-16, -24, -32 TX - RX	8050-16, -24, -32 TX - RX/HS	8050-40, ..., -64 TX - RX	8050-40, ..., 64 TX - RX/HS	8050-72, ..., -128 TX-RX
Fibre 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	15 dB
Min. link loss	0 dB	9 dB	0 dB	7 dB	0 dB
CWDM insert. loss	2 dB	2 dB	3 dB	3 dB	4 dB
Output power TX	3 dBm	3 dBm	3 dBm	3 dBm	3 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	1470-1610 nm
Connector type	SC/APC	SC/APC	SC/APC	SC/APC	SC/APC

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Subject to modification