

DVBus 8350

Features

- 16- to 128-channel digital video system with 2-way audio, data and telemetry
- 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 8350 series digital video multiplexers and demultiplexers transmit and receive from 16 up to 128 high-quality video signals with full-duplex audio, data and telemetry 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 8350 is available for 16 up to 128 video channels, in steps of 8, each step with 2 audio, 4 data and 2 telemetry channels. These 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 give an instant overview of the system's status. Smart Network Management (SNM™) provides information on all transmission parameters.

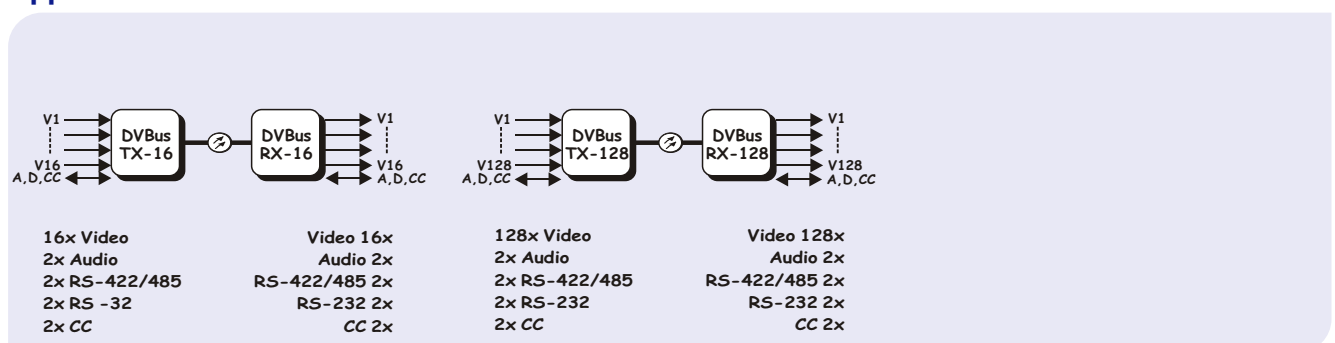
The wide operating temperature range of these units makes the DVBus 8350 system extremely well suited for environmentally harsh applications, such as traffic monitoring, incident management, video surveillance in city centres, airport security, etc.

Ordering information

Model	Description	Fibre type	Budget	Housing	Managed
DVBus 8350 TX-N*	N-ch. 10-bit digital video multiplexer, with audio and data	SM	19 dB	19"-rack	SNM
DVBus 8350 RX-N	N-ch. 10-bit digital video demultiplexer	SM	19 dB	19"-rack	SNM
DVBus 8350 RX-N/HS	N-ch. high-sensitivity digital video demultiplexer	SM	25 dB	19"-rack	SNM

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

Applications



Technical Specifications

Video

Number of channels	8 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
Differential gain	< 1%
Differential phase	< 1°
Group delay	< 10 ns
SNR	> 67 dB (weighted)
Connector type	BNC 75 (gold plated pin)

Audio

Number of channels	2 (full duplex)
Bandwidth	20 Hz to 20 kHz
Sampling resolution	16-bit
In-/output level	0 dBV (+6 dBV max)
Total harmonic distortion	< 0.25% at nominal level
SNR	> 75 dBA
Input impedance	> 50 k or 600 bal.
Output impedance	< 50 bal.
Connector type	RJ45

Powering

Power	
Mains voltage	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 temp., module status, optical levels etc.
Number of SNM interfaces	2x 9p sub-D per cabinet
Interface format	RS-485, 19.2 kb/s
Programmable contacts	2 per cabinet
Switch rating	2 A at 30 Vdc

Mechanical

Housing	19-inch racks
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Data

Number of channels	4 (full duplex)
Data interface	2x RS-232 2x RS-422/485 (2- or 4-wire)
Interface support	Current loop / TTY / TTL/ Manchester/Bi-phase
Data format	Asynchronous, serial
Data rate	DC to 64 kb/s
Sampling rate	750 Ksamples/s
Connector type	RJ45

Contact Closure

Number of channels	2 (full duplex)
Input	+5 V pull-up, 10 k
Threshold	0.75 V
Output	Fail-safe, potential-free
Switch rating	2 A at 30 Vdc
Connector type	RJ45

MC 11/EB-2 cabinets

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

Optical	8350-16, -24 TX - RX	8350-16, -24 TX - RX/HS	8350-32, ..., -56 TX - RX	8350-32, ..., -56 TX - RX/HS	8350-128 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	14 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	4.5 dB
Output power	3 dBm	3 dBm	3 dBm	3 dBm	3 dBm
Output wavelength	1510-1570 nm	1510-1570 nm	1470-1610 nm	1470-1610 nm	1470-1610 nm
Input power range RX	-1 to -20 dBm	-10 to -28 dBm	-1 to -20 dBm	-10 to -28 dBm	-1 to -20 dBm
Input power range TX	2 to -28 dBm	2 to -28 dBm	2 to -28 dBm	2 to -28dBm	2 to -28 dBm
Connector type	SC/APC	SC/APC	SC/APC	SC/APC	SC/APC

