

Features

- 16 to 128-channel digital video system with 2-way audio, data, and telemetry
- 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 8350

16 to 128-channel digital video, audio, data

Description

The DVBUS 8350 series digital video multiplexers and demultiplexers transmit and receive from 16 to 128 high quality video signals with 2-way audio, data, and telemetry 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 8350 is available for 16 to 128 video channels, in steps of eight, each step having two audio, four data, and two telemetry channels. These units are delivered preassembled as N-channel transmitters or receivers, including power supply and 19" rack(s).

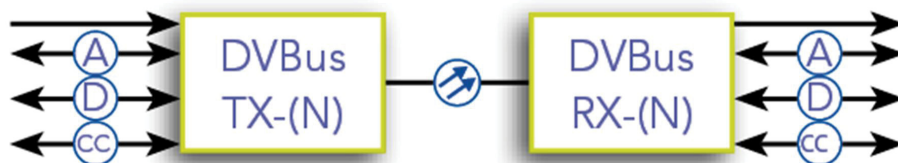
Installation and operation are easy as no electrical or optical adjustments are needed. LED indicators provide an instant overview of the system's status.

Smart Network Management (SNMTM) provides information on all transmission parameters.

The wide operating temperature range of these units makes the DVBUS 8350 system well-suited for environmentally harsh applications such as traffic monitoring, video surveillance in city centers, and federal and critical infrastructures.

Technical Specifications

DVBus 8350 16 to 128-channel digital video, audio, data



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)

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 1.5 Mb/s
Sampling rate	15 Msamples/s
Connector type	RJ-45

Contact Closure

Number of channels	2 (full-duplex)
Input	+5 V pull-up, 10 k Ω
Threshold	0.75 V
Output	Fail-safe, potential-free
Switch rating	2A at 30 VDC
Connector type	RJ-45

Technical Specifications

DVBus 8350 16 to 128-channel digital video, audio, data

Audio

Number of channels	2 (full-duplex)
Bandwidth	20 Hz to 20 kHz
Sampling resolution	16-bit
In-/output level	0 dBV (+6 dBV maximum)
Total harmonic distortion	<0.25% at nominal level
SNR	>75 dBA
Input impedance	>50 k Ω or 600 Ω balanced
Output impedance	<50 Ω balanced
Connector type	RJ-45

Management

LED status indicators	
DC	Power-on indicator (green)
NV	No video on input or output (red)
SYNC	Full-duplex link (green), local (red) or remote synchronization error (yellow)
Programmable contacts	2 per cabinet
Switch rating	2A at 30VDC

Powering

Power	1 MC 11/EB-2 rack
Mains voltage	230VDC (115 VAC opt)

Environmental

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

Mechanical

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

Optical

Optical	8350-16, -24 TX-RX	8350-16, -24 TX-RX/HS	8350-32...-56 TX-RX	8350-32...-56 TX-RX/HS	8350-72...-128 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	>45 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
Input power range TX	-2 to -28 dBm	-2 to -28 dBm	-2 to -28 dBm	-2 to -28 dBm	-2 to -28 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

Technical Specifications

DVBus 8350 16 to 128-channel digital video, audio, data

Ordering Information

Models	Description	Fiber Type
DVBus 8350 TX-N	N-channel 10-bit digital video multiplexer, with audio and data	SM
DVBus 8350 RX-N	N-channel 10-bit digital video demultiplexer	SM
DVBus 8350 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.
© Siqura Version: January 2012 V1.0 (First Edition) – Subject to modification

