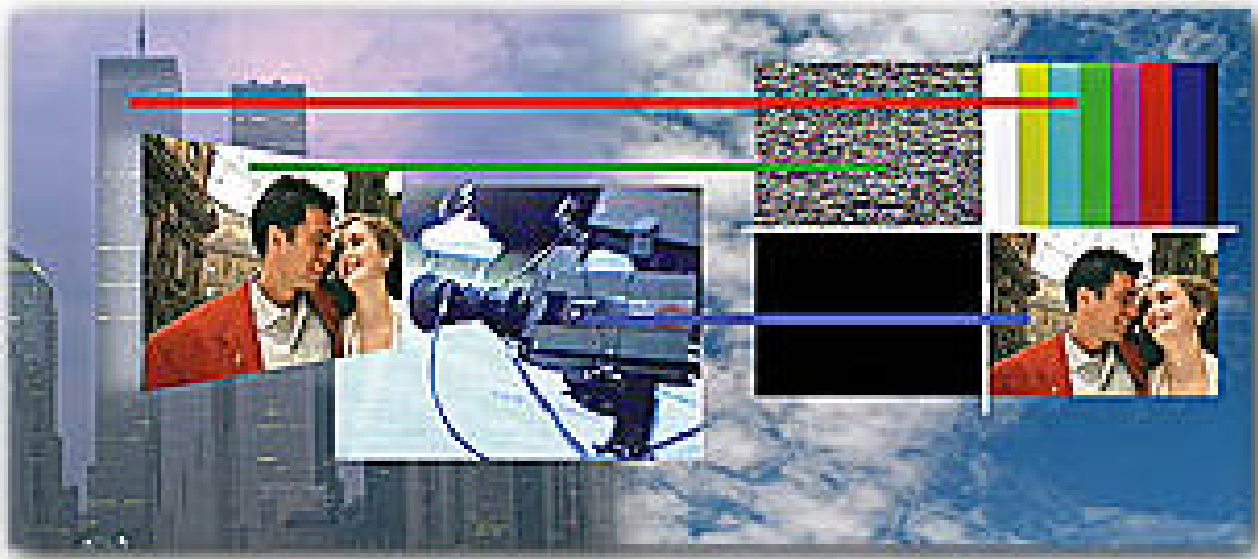
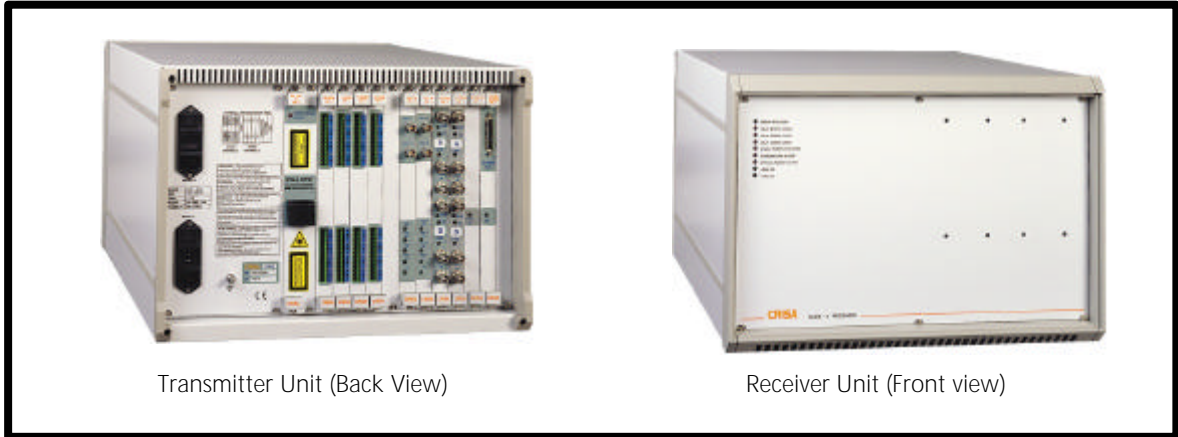


The Professional Connection



VLINK
VIDEO & AUDIO DIGITAL TRANSMISSION **8** SYSTEM

CRISA



Multichannel fiber optic system for transmission of high quality video, audio and data signals

VLINK-8 is a modular video transport system with the capability of digitally transmitting up to 8 high quality video channels or 4 SDI/DVB-ASI channels, or a mixture thereof, 32 high quality audio channels and 8 E1/T1 (G703 2Mbps) data channels on a single monomode optical fiber.

VLINK-8 is based on a digital high-speed multiplexing technique which guarantees a very high reliability of the system.

The system can be configured for medium (0-50 km) and long (>80 km) haul applications. Longer distances can be reached in custom configurations.

Vlink-8 Composition

- VLINK-8 Transmitter unit.
- VLINK-8 Receiver unit.
- Monomode Optical Fiber as transmission medium.

Features

- Contribution quality.
- Uncompressed digital video/audio transmission.
- Transmits up to 80 km without repeaters.
- Accepts digital (SDI/DVB-ASI) and analog video channels in a mixed configuration.
- 8 E1/T1 data channels
- Supports 1310 nm and 1550 nm lasers on a single mode fiber to accommodate WDM applications.
- Redundant power supply for system reliability.
- Modular design provides maximum configuration flexibility.
- Continuous monitoring of power supply voltages, received optical power and data link status.

- Remote monitoring possibility.
- Up to 64 video, 256 audio and 64 data channels on a single fiber by using DWDM.

Applications

- Interstudio connection.
- TV broadcast service.
- Satellite uplink
- Live video origination.
- CATV supertrunking.
- Studio to transmitter broadcast links.
- Real-time contribution

System Supervision

VLINK provides continuous monitoring of unit parameters like power supply voltages, received optical power and data link status, an alarm being raised if any parameter goes outside the specified margin. The status of the units is available in an external connector for remote monitoring.

System Reliability

The reliability of the VLINK System has been one of the design drivers of the equipment. It is achieved by:

- Redundant Power Supply subsystem with automatic changeover capability.
- The modularity of the concept guarantees that the failure of one interface board will not affect the functionality of the rest of the unit.
- Very high level electronic integration: single chip high-speed multiplexer/demultiplexer.

Analog Video Transmission

VLINK transports each baseband analog video signal as a digital signal, therefore with minimum degradation. All the 8 video channels are digitized with 10 bit linear resolution and no compression is used, providing a high quality video transport service. The sampling frequency and antialiasing filters used in the analog interface makes it possible to transport baseband video signals with a bandwidth of up to 5.5 MHz (6MHz in option).

The system can accept any of the most commonly used standards (PAL, NTSC, SECAM) or scrambled video signals. The clamping circuit of each input interface can be disabled, making it possible to transport any (non-video) analog signal within the specified bandwidth and dynamic range.

Vlink-8 Technical Data

Transmitter Unit

- 8 baseband multistandard video inputs / 4 SDI/DVB-ASI inputs.
- 32 baseband audio inputs.
- 8 E1/T1 data inputs
- 1 fiber optic connector output.
- total size: 19" / 7U (incl. redundant power supp. & cooling).
- mains power 110/220 VAC (with independent access for each redundant power supply section).
- 1 Sub-D connector for remote alarm monitoring.

Receiver Unit

- 8 baseband multistandard video outputs / 4 SDI/DVB-ASI outputs.
- 32 baseband audio outputs.
- 8 E1/T1 data outputs.
- 1 fiber optic connector input.
- total size: 19" / 7U (incl. redundant power supp. & cooling).
- main power 110/220 VAC (with independent access for each redundant power supply section).
- 1 Sub-D connector for remote alarm monitoring.

Optical Link

Fiber SM 9/125

FC-PC connectors

1310 nm DFB laser (1550 nm in option)

MD MkII model

0 dBm optical power

20 dB optical power budget

LD MkII model

+6 dBm optical power

35 dB optical power budet

SDI Channels

Signal format: BT 601 / 656

Connector: BNC

No synchronization of the SDI signals is required

Compatible with DVB 270 Mbps

Video Channels

Analogue bandwidth: 5.5 MHz (6MHz in option).

Sampling frequency: 13.5 MHz.

Resolution: 10 bit linear, no compression.

Differential Gain: < 1%

Differential Phase: < 0,5°

K2T: < 1%

Input/output impedance: loop-through / 75Ω

Equalization: adjustable (up to 100m of RG59)

Connectors: BNC.

Audio Channels

Analogue bandwidth: >20 KHz.

Sampling frequency: 52.7 KHz.

Resolution: 18 bit linear, no compression.

Signal to Noise ratio: Typically 90 dB before clipping.

Input impedance: balanced, selectable 600Ω / 47kΩ .

Output impedance: balanced, 66,4Ω .

Connectors: Phoenix-type.

Data Channels

8 E1/T1 G 703 2,048 kbps channels

Connector: BNC

No synchronization of the data channels is required.

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CRISA, C/ Torres Quevedo 9, PTM, 28760 Tres Cantos, Madrid
Tel + 34 91 8068600 Fax: + 34 91 8060235 Web: www.crisa.es