ENC 335

Low Latency, RealTime HD Video over IP Encoder/Decoder

Description

ENC335 is our brand new complete HD video over IP solution. An SD/HD video signal is received by the ENC335|Encoder, compressed, and transmitted via an IP network. The ENC335|Decoder captures data from an IP network, decompresses it and plays it back in original form as SD/HD video. The product can be configured with either a 3G-SDI or a DVI/HDMI interface, as required. This means that the video interfaces between sources and sinks can be mixed (e.g. HD-SDI camera connected to encoder with playback on HDMI monitor connected to decoder). JPEG 2000 compression allows considerable reduction of the data rate in the network without visible loss of quality. Minimal delay makes it the perfect choice for use in the broadcasting range. With the HDMI and the HD-SDI interfaces, audio signals can be embedded and de-embedded using the optional audio interface card. With the additional USB 2.0 interfaces, the modules can also be used for KVM applications. The IP network may be localized or extended to cover several regions by means of optional WAN technology. Encoders and decoders are mounted standalone in a 19" 1U rack enclosure and powered by dual power supply. ENC335 can be configured via a web browser, SNMP or through the front LCD panel.

Main Features

Modular design for various video interfaces for HDMI / DVI / VGA and 3G-SDI
Optional transmission of HDCP-protected signals
Separate audio plug-in to enable audio embedding and de-embedding
Video distribution through multicasting
Without ventilator and therefore noiseless devices
SNMP v1 and v2 interface for direct activation and control of the devices by any control software

ENC 335

1 Redundant Power Supply	**5**	Video Input
2 Dedicated Management Ethernet Interface	**6**	Video Input Loop (Monitoring)
3 Bidirectional USB ports	**7**	Dual Video Output
4 Redundant Traffic ports	**8**	Expansion Slot

ENCODERS/DECODERS

Compression system :	JPEG2000
Video resolution :	max. 1920 x 1080P, min.640 x 480
Delay per device :	≈ 1.5 frames (= 25ms@60Hz)
Delay, total :	≈ 3 frames (= 50ms@60Hz) + network delay
Frame rate :	max. 60 Hz, min. 24 Hz
Pixel clock :	max. 150 MHz, min. 25 MHz
Colour depth :	12 bit / component
Audio channels :	8 in the same direction as video** 8 in the opposite direction to video**
Audio sampling rate :	192 KHz
Audio coding :	32 bit, uncompressed
Network interface :	1 x 10/100/1000 BaseTX, 1 x RJ45
Data interface :	USB 2.0 HID, 1 plug type A, 1 plug type B
Management :	Internal web server, SNMP v1, v2

G-SDI Card

Max. resolution :	3G-SDI (SMPTE424M)
Plug type :	BNC
Connections :	1 x video in (for encoders), 1 x monitor out for monitoring, 2 x video out (for decoders)

HDMI/DVI/VGA Card

Version :	HDMI 1.3
Plug type :	DVI-1 for encoder, DVI-D f. decoder
Connections :	1 x video in (for encoders), 1 x video out (for decoders)
HDMI interface :	Intermediate connector included
DVI interface :	Directly connectable
VGA Interface :	VGA input only 3

Analogue Audio Card

Audio frequency range :	20Hz – 20kHz
Stereo phones :	30mW / 32Ohm, adjustable 6 ... -73dB
Mono microphone:	input 3,5mm jack asymmetric, 20mV / 14kOhm, adjustable 0 ... 20dB, THD at 1kHz, -1-dB input, 0-dB gain -80dB
Stereo line output:	3,5mm stereo jack asymmetric, 1V (RMS) / 10kOhm/50pF, 90-dB SNR (A-weighted at 48kHz), THD at 1kHz, 0-dB input -85dB
Stereo line input :	3,5mm stereo jack asymmetric, 1V (RMS) / 30kOhm/10pF, adjustable 12 ... -34dB, 80-dB SNR (A-weighted at 48kHz), THD at 1kHz, -1-dB input 0-dB gain -80dB
Sampling Rate :	48kHz and 96kHz
RS232 interface:	RS232 RX/TX at 3,5mm jack

ScreenService