

Chameleon Encoder

Encoder for HD/SD-SDI or A/V Inputs

Up to 4x HD/SD-SDI or A/V Analog Inputs per Module
Encode HD/SD MPEG-4 or MPEG-2 IP Outputs

Product Description

The Chameleon Encoder is a professional and high density HD/SD audio & video encoding device which adds the feature of MPEG-4 and MPEG-2 encoding to the Chameleon product line. With the same form factor as the Chameleon modules, the Chameleon Encoder can be used in any Chameleon base unit. The Chameleon Encoder allows you to add services available in HD/SD-SDI or A/V analog format to your digital network. The 4 encoded service will be provided by the IP output interface.

Features

- ✓ HD/SD MPEG-4 (AVC, H.264) and HD/SD MPEG-2 video encoding
- ✓ Up to 4 HD/SD-SDI or A/V analog inputs per module
- ✓ Professional multiplexer integrated
- ✓ SPTS and MPTS streaming (CBR or VBR)
- ✓ Supports PSI/SI processing
- ✓ Integrated into the CHAMELEON System management
- ✓ Control and management via web-UI

Stream Local Community Content or Connect Directly with Broadcaster Sites



MORE FROM THE CHAMELEON PLATFORM



GNHWUW2 Chameleon Processor

The GNHWUW2 processor is equipped with multi-tuner support for DVB-C/T/T2/S/S2/S2X and ISDB-T reception. The software can be modified and upgraded at any time, without changing the hardware.



GNHWENC2H HD/SD-SDI or A/V Encoder

A professional and high density HD/SD audio & video encoding device which adds the feature of MPEG-4 and MPEG-2 encoding. With the same form factor as all Chameleon modules, it can be used in any Chameleon base unit.



GN 50 Base Unit

A 19" 3HE base unit for up to 10 Chameleon modules. It has an integrated power supply and ventilation system and can be used alone or in connection with an existing installation to add additional Chameleon modules. An IP switch can be integrated.

See all available products on katalog.wisi.de or contact your WISI sales representative.

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Encoder for HD/SD-SDI or A/V Inputs



Technical data	
HD-SDI Input	
Number of ports	4 pcs. (3x BNC, 1x F-connector)
Video input	HD-SDI, Audio embedded
Audio input	Stereo, AC-3 pass through
Input format HD-SDI	1080p25/30, 1080i50/60/59.94, 720p50/60/59.94
Impedance	75 Ω
Compliance	HD-SDI SMPTE 292M, SMPTE 299M
SD-SDI input	
Number of ports	4 pcs. (3x BNC, 1x F-connector)
Video input	SD-SDI, Audio embedded
Audio input	Stereo, AC-3 pass through
Input format SD-SDI	576i50, 480i59.94
Impedance	75 Ω
Compliance	SD-SDI SMPTE 259M-C, SMPTE 291M
Analog video input	
Number of ports	4 pcs. 3,5 mm jack socket
Input format	Composite FBAS-signal (PAL/NTSC/SECAM)
Impedance	75 Ω
Input level	1 V _{ss} (±0,4 V)
Input frequency range	20 Hz...5 MHz
Frequency response	≤ ±2 dB (20 Hz...4 MHz)
Analog input audio	
Input format	Left, Right asymmetrical
Impedance	600 Ω/15 kΩ (switchable)
Input level	-4 dBm / 500 mV _{eff}
Input level range	-18...+18 dB
Input frequency range	40 Hz...15 kHz
Video Encoding	
Encoding capacity	4x HD/SD MPEG-2/MPEG-4
Video system	MPEG-2 HD/SD and MPEG-4 HD/SD (H.264/AVC)
Picture size	1080p25/30, 1080i50/60/59.94, 720p50/60/59.94, 576p50, 480p60/59.94, 576i50, 480i60/59.94
Profile MPEG-4	Baseline, Main, High

Technical data	
Bit rate	MPEG-2 10-19Mbps, MPEG-4 6-13Mbps @ 1080p25/30, 1080i50/60/59.94, 720p50/60/59.94; MPEG-2 4-12Mbps, MPEG-4 2-6Mbps @ 576p50, 480p60/59.94; MPEG-2 2-8Mbps, MPEG-4 1-4Mbps @ 576i50, 480i60/59.94
Chroma sample	4:2:0
Aspect ratio	16:9 for HD; 4:3 for SD
Subtitle DVB Support	No
Subtitle OP47 Support	No
Picture size conversion	Downscaling yes, Upscaling no
Frame rate conversion	No
Test pattern	Yes
Audio Encoding	
Audio-system	ISO 11173-3 (MPEG-1 L2), MPEG-2 AAC (LC)
Number of audio channels	1 per video input @ 4x HD/SD MPEG-2/MPEG-4; 2 per video input @ 2x HD/SD MPEG-2/MPEG-4
Sampling frequency	48 kHz
Bit rate	64...288 Kbps (max. MPEG1 L2/AAC)
Audio modes	Stereo, AC-3 pass through
Sampling rate conversion	No
Streaming-In-/Output	
IP-Inputs	0 or 32 pcs. (32 with GNSTR software option)
IP-Outputs	4 or 32 pcs. (32 with GNSTR software option)
IP-Compliance	ISO/IEC 13818
IP-Input bitrate	Max. 425 Mbit/s per IPTS, Max. 850 Mbit/s total
IP-Output bitrate	Max. 425 Mbit/s per IPTS, Max. 850 Mbit/s total
IP-Input protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3
IP-Output protocol	UDP/RTP/RTP+FEC Unicast and Multicast, IGMP v2 and v3
IP-TS-Input format	SPTS CBR/VBR, MPTS CBR
IP-TS-Output format	SPTS CBR/VBR, MPTS CBR

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Technical data	
IP-FEC Inputs	0 or 32 pcs. (with GNSTREC software option)
IP-FEC Outputs	4 or 32 pcs. (with GNSTREC software option)
IP-FEC compliance	SMPTE 2022-1, SMPTE 2022-2
IP-Packet format	MPEG over UDP/IP and RTP/IP
IP-Packet size	188 Byte
IP-PCR restamping	Yes
Processing	
Service remultiplexing	Yes (GNSYMUX is included)
PID filtering and remapping	Yes
PCR correction and de-jitter	Yes
Advanced PSI/SI regeneration	Yes
NIT generation	No
Compliance	ETSI EN 300 468
Processing bitrate	Max. 1200 Mbps total
Number of PIDs	Max. 2000 PIDs total
Connectors	
RJ45	2 pcs. (1x Management, 1x Streaming)
Analog audio input	4 pcs. 3,5 mm jack socket
Video input	4 pcs. (3x BNC, 1x F-connector)
GigE/Control/Power supply	CompactPCI Type C (SGMII)
General data	
Power consumption	max. ≤18 W
Operating temperature range	-5°C...+45°C, 23°F...113°F, (ETSI EN 300 019-1-3 Class 3.1)
Max. humidity, non condensing	95 %
Electro Magnetic Compatibility (EMC)	DIN EN 55022:2008-05
Safety compliance	-
Hardware revision	2000
Software version	3.1

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