

Multi-Channel Standard Definition AVC Encoder



Quad SD H.264 encoder for IPTV

The ATEME Kyrion® AS2204 is a multi-channel MPEG-4/H.264 encoder enabling IPTV applications. With support for up to four channels in a single 19" rack unit, the Kyrion AS2204 allows video service operators to deploy hundreds of SD channels within a compact configuration.

Applying the latest ATEME compression technology, the Kyrion AS2204 produces bandwidth efficient SD streams, delivering greater customer reach and making the most of your IP network investments.

Kyrion AS2204 is a fully programmable hardware design offering a complete set of MPEG-4/H.264 tools including full support for interlaced video (MBAFF). The Kyrion encoder benefits from ATEME's MPEG-4 encoding expertise by enabling state-of-the-art compression algorithms in real-time.

KEY FEATURES

- 4 SD MPEG-4 AVC/H.264 channels in a 1U rack module
- Bit rate range from 0.5 to 10 Mbps
- PiP for each channel for low resolution service
- MPEG-2 TS over UDP or RTP
- Digital or analog video inputs

BENEFITS

- Compact and energy saving solution
- SDTV broadcast quality at lowest bit rate
- Integrates with DataMiner NMS solution for redundancy

VIDEO SPECIFICATIONS

Input channels

4 SD channels

Compression standard

MPEG-4 AVC / H.264 - Main and High Profile up to Level 3

GOP structure

Fixed or adaptive configuration
Automatic I frame insertion
Automatic scene cut detection

Video input: 576i and 480i

Resolutions

576 x 720, 576, 544, 480 and 352 pixels
480 x 720, 576, 544, 480 and 352 pixels

Frame rates

576i @ 25 Hz, 480i @ 29.97 and 30 Hz

Picture in Picture

MPEG-4 AVC / H.264 Baseline and Main Profile
Flexible resizing from 352 x 288 down to 64 x 64 in 16 pixels steps (CIF, QCIF, SIF)
Identical or independent GOP structure

Pre-processing

Linear and nonlinear spatial filtering
Inverse telecine (3:2 pull-down)
Logo insertion*

Rate control mode

Multi-pass look-ahead CBR and Capped VBR

Encoding Bit-rate: 0.5 to 10 Mbps per channel

Ancillary data

Closed captioning compliant with EIA-608, EIA-708, SMPTE 334 and standard ATSC.
DVB Teletext/CEEFAX

Signaling

Wide Screen Signaling (WSS)
Active Format Description (AFD)

Standard: MPEG-2 TS / DVB / ATSC

AUDIO COMPRESSION

Compression formats

MPEG-1 Layer II, 64 to 384 kb/s (stereo ch.)
MPEG-2/MPEG-4 AAC-LC 16 to 512 kb/s (stereo ch.)
HEV1-AAC, HEV2-AAC 16 to 512 kb/s (stereo ch.) (software option)
Dolby Digital (AC.3/EAC.3) pass-through

Up to 8 stereo pairs, 5.1 channels management

Sampling frequency : 32, 44.1, 48 kHz

*Contact us for availability

OUTPUT TRANSPORT LAYER SPECIFICATIONS

Transport encapsulation

MPEG-2 Transport Stream over UDP/IP or RTP/UDP/IP
RTP/RTSP over UDP
Unicast / Multicast streaming
PRO-MPEG FEC COP3r2
188/204 bytes selectable packed size

INPUTS / OUTPUTS INTERFACES

Video input

SD-SDI (SMPTE 259M-C) (AS2204)
4 analog inputs for PAL/NTSC operation (AS2204-A)

Audio input

Embedded in SD-SDI (up to 8 stereo channels per SDI input)
AES input: up to 8 inputs.
Analog input: up to 8 audio balanced (-10 dBV to +20 dBV/600 Ohms)

Output interfaces

4 x independent Gigabit Ethernet ports (100/1000 BaseT connectors)
- 2 x dedicated to service streaming
- 2 x out-of-band, dedicated to management
Up to 3 DVB-ASI (75 Ohms BNC connector) *

Discreet I/O*

Alarms and synchronization on DB connector

CONFIGURATION AND MANAGEMENT

System management

SNMP (MIB v2c) with remote SNMP supervisor
Embedded web server configuration
Front panel with live video On Screen Display for easier monitoring

PHYSICAL

Dimensions 19" 1-RU (482 x 44,5 x 508 mm / 19" x 1.75" x 20")
Weight 7.5 kg / 16.5 lbs

ENVIRONMENTAL

Cooling air flow from front to rear
Operating temperature 5 to 40 °C / +41 ° to +104 °F
Storage temperature -20 to 70 °C / +32° to +158 °F
Operating humidity 5 to 90% (non condensing)
Input voltage range 100-240 VAC , 50/60 Hz
Typical consumption 80 W

CERTIFICATIONS

ROHS
Electrical compliance and safety
§ EN 55022 : 2006, § EN 55024 : 1998 / A1 : 2001 / A2 : 2003,
§ FCC PART 15 Class B : 2006, § EN 61000-3-2 : 2000 / A2 : 2005,
§ EN 61000-3-3 : 1995 / A1 : 2001 / A2 : 2005, § EN/UL/CA 60950-1

ORDERING INFO

AS2204 4 digital video / AES audio
AS2204-A 4 analog video / audio

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