

HIGH PROFILE MPEG-4/AVC ENCODER

The best choice for demanding contribution applications

Ateme Kyrion® AS1201 is the ultimate high quality MPEG-4/AVC Encoder for Standard Definition Broadcasters. Service provider and telecommunication operators involved in programs contribution will take full benefit of AteMe high picture quality.



Kyrion AS1201 is the first Encoder on the market able to handle MPEG4/AVC Main and High Profile, reaching the utmost picture quality with a large operating scale - from 0,5 to 10Mbit/s .

This 19" 1-RU SD encoder features the state-of-the-art in AVC compression, thus perfectly fulfilling its mission as a contribution and high-end broadcast encoder.

Kyrion® AS1201 Contribution Encoder

Contribution quality from 1.5 Mbps

MPEG-4 AVC / H.264 High Profile for the highest available quality

Extensive video pre-processing including:

- > Motion compensated Noise reduction
- > Resolution changing
- > Inverse telecine

Multi-pass look-ahead

Constant and variable bit-rate encoding from 0.5 Mbps to 10 Mbps.

MPEG-2 TS over UDP or RTP with PRO-MPEG FEC (COP3r2)

KEY FEATURES

VIDEO SPECIFICATIONS

Input channel	One SD channel (SDI)
Compression Standard	MPEG-4 AVC / H.264 Baseline, Main and High Profile up to Level 3
Supported AVC tools	Interlace (MBAFF) and Progressive CABAC/CAVLC entropy coding I, P and B frames with multiple references All intra prediction modes, inter partitions down to 8x8 Weighted prediction In-loop deblocking filter (applied over the whole frame) 8x8 transform and quantization
GOP structure	Fixed or adaptive configuration Automatic I frame insertion
Video input	SD 576i and 480i Automatic input format detection and configuration
Resolutions	576i and 480i x 720, 544 and 352 pixels
Frame rates	576i@25 Hz 480i@ 29.97 and 30 Hz
Pre-processing	Horizontal resizing down to a factor of 4 in 16 pixels steps Programmable FIR filtering (15x15 luma, 11x11 chroma) Temporal decimation
Rate control mode	Multi-pass look-ahead CBR
Encoding Bit-rate	0.5 to 10 Mbps
Ancillary data	Closed captioning extraction from VBI

AUDIO SPECIFICATIONS

Compression formats	MPEG-1 Layer II MPEG-4 LC-AAC, HEV1-AAC, HEV2-AAC Dolby Digital (AC.3) pass-through*
Number of input channels	2x stereo pairs or 1x 5.1 channel (SDI embedded)
Sampling frequency	32, 44.1, 48 kHz
Rate control mode	CBR
Compressed Output Bitrate	MPEG-1 Layer II 64 to 384 kb/s (stereo ch.) MPEG-4 AAC 16 to 512 kb/s (stereo ch.) Dolby Digital (AC.3) Pass-through (same as input)*

*Consult factory for availability

ORDERING INFO

AS1201	IP output
-ASI	IP + Dual ASI (Mirrored Output)

OUTPUT TRANSPORT LAYER SPECIFICATIONS

Transport encapsulation	MPEG-2 Transport Stream over UDP/IP or RTP/UDP/IP with PRO-MPEG FEC (COP3r2) RTP/RTSP over UDP Unicast / multicast streaming MPEG-2 Transport over ASI - option
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INPUTS / OUTPUTS INTERFACES

Video Input	SD-SDI (SMPTE 259M-C) with EDH error detection and correction
Audio Input	Embedded in SDI, up to 2 stereo pairs or one 5.1 multi-channel
Output Interfaces	3x independent Ethernet ports (100/1000 BaseT connectors) - 2x Dedicated to service streaming (MEDIA 1&2) - 1x Out-of-band, dedicated to management Dual ASI (1 + Mirrored) - option

CONFIGURATION AND MANAGEMENT

System Management	SNMP (MIB v2c) with remote SNMP supervisor Embedded Web-server configuration Front panel with LCD/keypad
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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	0 to 70 °C / +32° to +158 °F
Operating humidity	5 to 90% (non condensing)
EMC Emission	EN 55022 Class B : 1998 / A2 : 2003 FCC PART 15 : 2005
EMC Immunity	EN 55024 : 1998 / A1 : 2001 / A2 : 2003 EN 61000-3-2 : 2000 EN 61000-3-3 : 1995 / A1 : 2001
Electrical Safety	IEC 60 950-1 : 2001 UL 60950-1 and CAN/CSA 22.2 NO 60950-1-03
Input Voltage Range	100-240 VAC , 50/60 Hz
Typical Consumption	250 W



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