

MAGEWELL

Ultra Encode AIO Technical Specifications

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Input Features

- HDMI supported input & loop-through signals include:
 - 4096x2160 30fps 4:4:4/4:2:2
 - 4096x2160 60fps 4:2:0
 - 2048x1080p/2048x1080i/1920x1080p/1920x1080i 23.98/24/25/29.97/30/47.95/48/50/59.94/60
 - 1280x720p 25/29.97/30/50/59.94/60
 - 720x576 25p/50i (PAL SD)
 - 720x480 29.97p/59.94i (NTSC SD)
- SDI supported input & loop-through signals include:
 - 2048x1080 60fps 4:2:2
 - 2048x1080p/2048x1080i/1920x1080p/1920x1080i 23.98/24/25/29.97/30/47.95/48/50/59.94/60
 - 1280x720p 25/29.97/30/50/59.94/60
 - 720x576 25p/50i (PAL SD)
 - 720x480 29.97p/59.94i (NTSC SD)
- Custom EDID
- 8/10/12-bit color
- Input & loopthrough 16-Channel SDI embedded audio
- Input & loopthrough 8-Channel, 24-bit HDMI embedded audio, 192kHz sample rate
- Input Audio from 3.5 mm LINE IN
- SD/HD/3G BNC input & loopthrough
- SD (ST 259)/HD (ST 292)/3Ga (ST 425)/3Gb (ST 425)/3Gb-DL(ST 425)/3Gb-DS(ST 425) standards
- HDMI Input and loop-through interfaces: HDMI 1.4a, DVI-D

Encoding Features

- Dual stream encoding: main stream and sub stream
- Max bitrate: 32Mbps
- HDMI supported resolutions include:
 - 4096x2160p/3840x2160p/2560x1440p30
 - 1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
 - 720x576p25
 - 720x480p30
- SDI supported resolutions include:
 - 1920x1080p/1280x720p 23.98/24/25/29.97/30/50/59.94/60
 - 720x576p25
 - 720x480p30
- H.264/H.265 (HEVC) SEI message supports system timecode or RP-188 timecode extracted from input
- H.264/H.265 (HEVC) SEI message supports native CEA-608/608 over 708 captions
- Converting video aspect ratio of dual streams
- Encoding 8-channel AAC
- Supported audio bitrates: 256/192/128/96/64/48/32/16 kbps
- Extracting audio from input signal and output through LINE OUT
- Encoding videos after de-interlacing
- Encoding interlaced input signal as main and sub streams in the format of interlaced H.265 (HEVC)

Streaming Features

- Natively support Facebook, Twitch and YouTube
- Supported streaming protocols: RTSP/RTMP/RTMPS/SRT Caller/SRT Listener/NDI[®]|HX2/NDI[®]|HX 3/HLS/TS over UDP/TS over RTP/TVU ISSP
- Allow simultaneous 6 sessions over multiple streaming protocols, containing 1 session of HLS, RTSP, NDI[®]|HX2, or

- NDI®|HX 3 (if included)
- Specify main stream or sub stream for each streaming session
- Support for streaming scheduler for each destination

Recording Features

- Support for normal recording and loop recording
- Record to external SD card and external USB storage
- Record the main or sub stream
- Download recorded files via webUI
- Support for recording schedule
- Video recordings in MP4 or MOV format
- Share recorded files with NFS/CIFS/SMB

Configuration Management

- Real-time LCD monitor for system status and input signal
- Register with Magewell Cloud
- Remote control via WebUI and Magewell Cloud
- Access WebUI via PC and smartphone
- Provide comprehensive information regarding the system information of device and working status in real-time via WebUI
- Video thumbnail preview via WebUI
- Add up to 8 overlays, including text, picture, and clock
- Configure parameters of volume and color, input and output signals, encoding profiles, no signal image, the Ethernet and Wi-Fi connection, as well as date and time via WebUI
- Function as a WiFi Access Point and a WiFi station simultaneously
- Update firmware
- Support for Microsoft Edge/Firefox/Chrome/Safari/Opera web browsers
- Provide HTTP APIs

Network Interfaces

- Wired Ethernet network: 10/100/1000Mbps
- IEEE 802.3af PoE
- Wi-Fi 802.11 a/b/g/n/ac
- 3G/4G USB mobile broadband Modem (not included)

Input/Output Interfaces

- SD/HD/3G BNC input and loop-through interfaces
- HDMI input and loop-through interfaces
- 3.5mm LINE IN
- 3.5mm LINE OUT
- USB Type-C (config)
- SD card slot
- 2 x USB Type-A

LCD Display & LED Indicators

- 1.9 inch LCD display with 320x170 resolution enabling real-time system status monitoring
- LEDs indicators show the status of power, input signal, recording and streaming

Power Supply and Consumption

- DC 9 ~ 18 V
- Max power consumption: TBD

Form Factor

- 214.9mm x 128.2mm x 44.55mm
- Support to mount onto a standard 1U rack with provided rack-mount kit

Accessories

- 1 x Screw locking DC power adapter
- 2 x Wi-Fi antenna
- 1 x HDMI cable
- 7 x M2.5 screws
- 1 x Retainer plate
- 1 x 1U short rack ear
- 2 x 1U long rack ears

Working Environment

- Operating temperature: 0 to 40 deg C
- Storage temperature: -20 to 70 deg C
- Relative humidity: 5% to 90% non-condensing