MAGEWELL

Ultra Encode HDMI Technical Specifications

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Input Features

- Max HDMI input & loop-through signals:
    - 4096x2160 60fps 4:2:0
    - 4096x2160 30fps 4:4:4/4:2:2
- Custom EDID
- Supported inputs include:
    - 4096x2160/3840x2160p 23.98/24/25/29.97/30/59.94/60
    - 2560x1080p 23.98/24/25/29.97/30/50/59.94/60
    - 1920x1080p 23.98/24/25/29.97/30/50/59.94/60/100/119.88/120
    - 1920x1080i 25/29.97/30/50/59.94/60
    - 1280x720p 23.98/24/25/29.97/30/50/59.94/60/144
    - 720x576p 50/100/144
    - 720x576i 25/50
    - 720x480p 59.94/60/144
    - 720x480i 29.97/30
- 8/10/12-bit color
- Input & loopthrough 8-Channel, 24-bit HDMI embedded audio, 192kHz sample rate
- Input audio from 3.5 mm LINE IN
- HDMI Input and loop-through interfaces: HDMI 1.4a, DVI-D

Encoding Features

- Dual stream encoding: main stream and sub stream
- Max bitrates:
    - Main Stream - 16Mbps
    - Sub Stream - 2Mbps
- Support resolutions:
    - HD: 1920x1080, 1600x1200, 1440x1080, 1440x900, 1280x1024, 1280x960, 1280x800, 1280x720, 1024x768
    - SD: 960x540, 800x600, 768x576, 720x576, 720x540, 640x480, 640x360, 480x360, 480x270
- Supported frame rates: 60/59.94/50/30/29.97/25/24/15/10/5fps
- H.264/H.265(HEVC) video encoders provide time code SEI message setting
- Encoding 2-channel AAC at 48kHz, 16-bit
- Supported audio bitrates: 256/192/128/96/64/48/32/16 kbps
- Extracting audio from HDMI signal and output through LINE OUT
- Encoding videos after de-interlacing

Streaming Features

- Natively support Facebook, Twitch and YouTube
- Supported streaming protocols: RTSP/RTMP/RTMPS/SRT Caller/SRT Listener/NDI|HX2/HLS (push)/TS over UDP/TS over RTP
- Allow simultaneous sessions over the same streaming protocol. Streaming protocols are as follows.
    - Up to 6 sessions of TS over RTP and TS over UDP simultaneously
    - Up to 6 sessions of SRT Caller and SRT Listener simultaneously, containing one SRT Listener session at most (max 8 clients simultaneously)
    - Up to 6 sessions of RTMP and RTMPS simultaneously
- Stream only 1 session of HLS (push), RTSP, or NDI|HX2
- Total bitrates for different network connection types:
    - 24Mbps for all streams is recommended for a wired network connection
    - 16Mbps for all streams is recommended for a wireless network connection
- Specify streaming main stream or sub stream for each session

Configuration Management

- Support registration on Magewell Cloud platform
- Remotely control with WebUI and Magewell Cloud
- Provide comprehensive information regarding the system information of device and working status in real-time
- Video thumbnail preview
- Configure parameters of volume and color, input and output signals, stream profiles, no signal image, the Ethernet and Wi-Fi connection, as well as date and time
- Update firmware
- Export configuration profiles of the device
- Support IE/Edge/Firefox/Chrome/Safari/Opera web browsers
- Provide HTTP APIs

Network Interfaces

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

Input/Output Interfaces

- HDMI 1.4a input and loop-through interfaces
- 3.5mm LINE IN
- 3.5mm LINE OUT

LED Indicators

- LEDs indicating the status of power, input signal, streaming, Ethernet and Wi-Fi connection

Power Supply and Consumption

- DC 5V/2A
- Max power consumption: ~9.5 W

Form Factor

- 106.6mm x 106.2mm x 25mm

Accessories

- AC adapter
- Wi-Fi antenna
- USB 2.0 Type B cable
- HDMI cable
- T-bracket

Screw Mounting Hole

- 2 x M3 threaded hole
- A standard 1/4"-20 socket provided by T-bracket

Working Environment

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