

iG-ULL-Streamer

ULL Streamer and Recorder

iWave' s ULL Streamer meets the real-world challenges and dispenses a streaming solution over WiFi 6E/7 and Ethernet for ultra-low Latency streaming. The applications of the device are for live video streaming, embedded vision and medical image applications. It is capable to capture high resolution video (7680 × 4320 pixels at 60frames) and compressing and decompressing video streams simultaneously at resolutions of up to 3840 x 2160 pixels at 60 frames per second (4K UHD at 60 Hz).

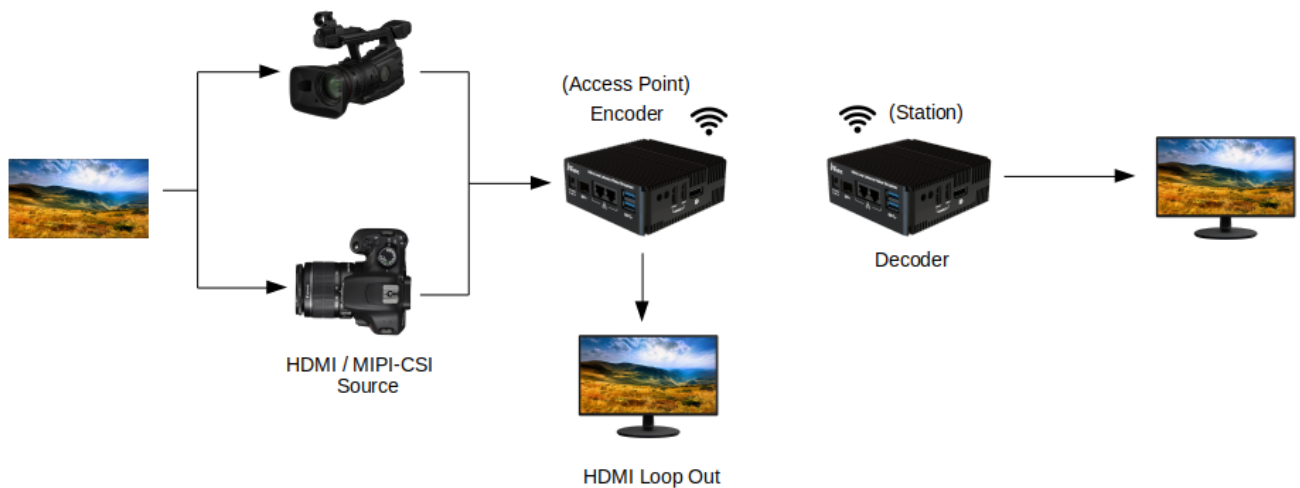
The product provides HDMI2.1 input/output and MIPI-CSI input. It does HDMI 2.1/MIPI-CSI input video encode and live steam or record in M.2 SSD/USB storage, capture the stream, decode and display live. The video streams are secured by encryption and decryption features provided in the ULL streamer. AES encryption method is used to scramble video content for secure broadcasting



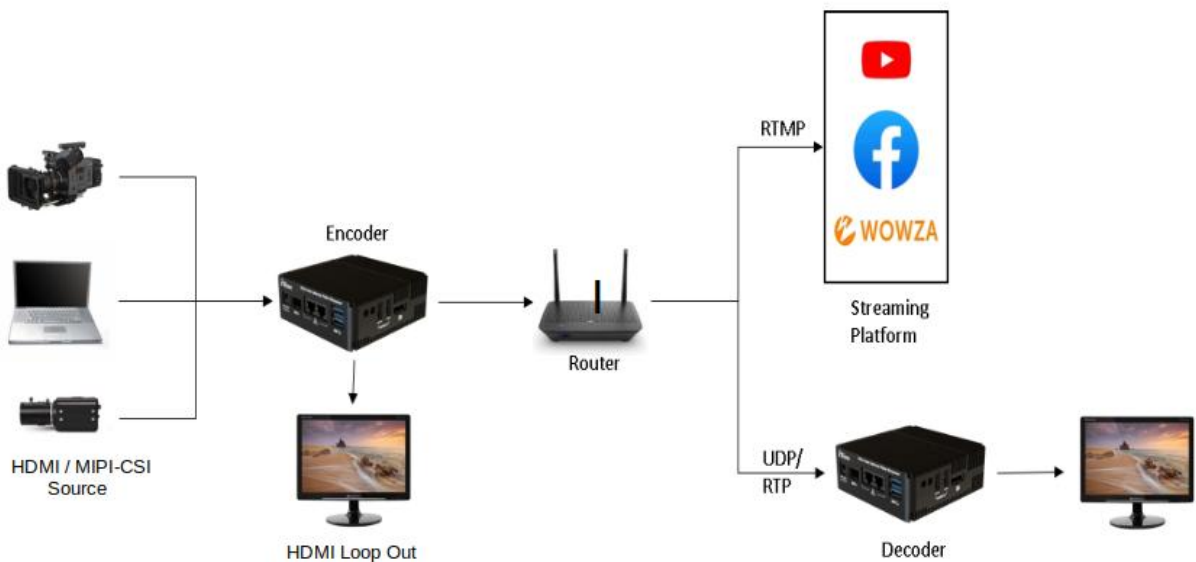
Highlights

- ❖ HEVC (H.265)/AVC(H.264) Encoder and Decoder
- ❖ 2-channel stereo audio from HDMI2.1/2.0
- ❖ HDMI 2.0/HDMI 2.1/MIPI-CSI input interfaces
- ❖ HDMI 2.0/HDMI 2.1/Loopout output interfaces
- ❖ Streaming over Wi-Fi 6e/7 and Ethernet
- ❖ UDP, RTMP, RTP, SRTP protocol
- ❖ Up to 8K@60 resolution input and output video capture support
- ❖ Simultaneous encoding and decoding 4K60Hz
- ❖ Recording and playback prerecorded video
- ❖ Capture, encode and transmitting latency 11ms
- ❖ Receive, decode and display latency 9ms
- ❖ Collective point to point latency below 100ms
- ❖ video encryption and decryption

ULL Streamer and Recorder over WiFi



ULL Streamer and Recorder over Ethernet



Hardware Specifications

Video Interfaces	• Input interfaces: HDMI2.1/HDMI 2.0/MIPI-CSI • Output interfaces: HDMI2.1/HDMI2.0/Loop out
Connectivity	• Gigabit Ethernet x2, WiFi 6E/7 x1, Bluetooth v5.3 x1
Storage	• USB3.0 Host x2 • M.2 M-key SSD x1
Power Input and Operating Temperature	• 12V, 5A AC-DC Adaptor • 0°C to 55°C
Enclosure Dimension and Form Factor	• Enclosure Form Factor: 109mm x 109mm x 41mm • Cooling Method: Passive Heat Sink Enclosure

Software Specifications

Resolution Support	• HDMI2.1 up to 7680x4320p 60Hz • HDMI 2.0 up to 3840x2160p 60 • MIPI-CSI up to 3840x2160p 60
Encode/Decode	• H.264/H.265
Audio	• HDMI2.1/2.0 Built-in Audio
Protocol support	• UDP, RTMP, RTP, SRTP
Latency **	• Encoder latency – 11 ms • Decoder latency – 9 ms • Glass to Glass [both encoder & decoder] latency – 66 ms
Video Encryption and Decryption	• Encryption and decryption to secure video streaming
Others	• Bitrate and profile configuration • Rescaling input resolution • Synchronized Audio and video • Control & Monitoring through web browser

Note:

**** Point to point streaming with UDP protocol in local network**

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