iWave

iW-ULL-Streamer
ULL Streamer and Recorder

iWave's ULL Streamer meets the real-world challenges and dispense a streaming solution for ultra-low Latency streaming. The applications of the device are for live video streaming and embedded vision. It is capable of compressing and decompressing video streams simultaneously at resolutions of up to 3840 x 2160 pixels at 60frames per second (4K UHD at 60 Hz).

The product provides 12G-SDI/HDMI2.0 input/output. It does 12G-SDI/HDMI 2.0 input video encode and live steam or record in M.2 SSD/USB storage, capture the stream, decode and live display. 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
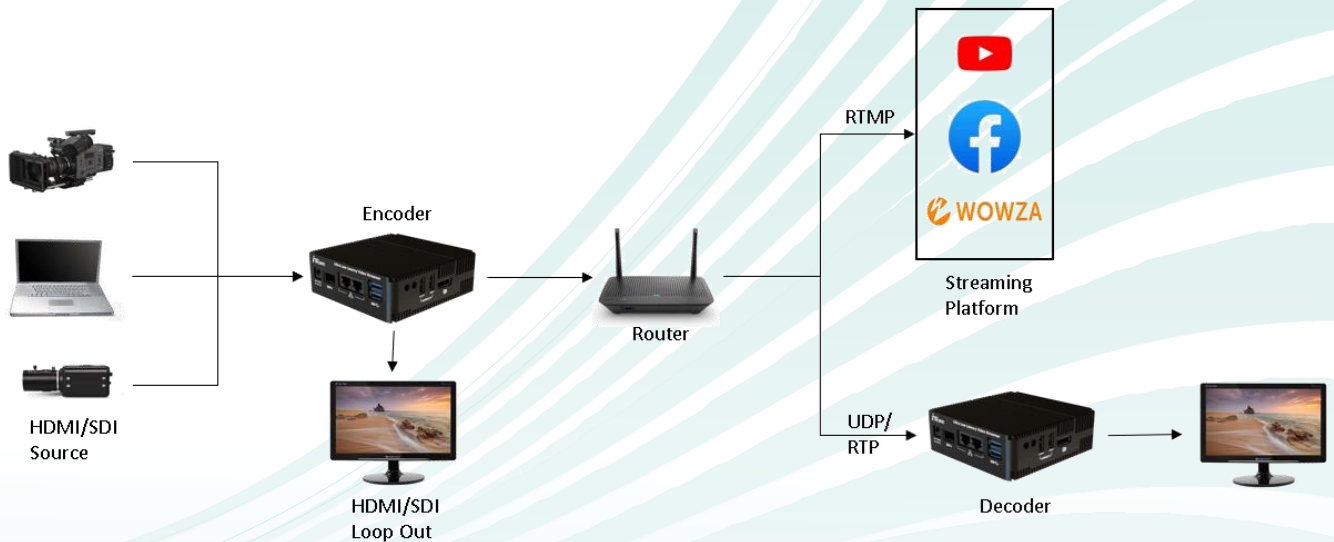
iW-ULL-Streamer HIGHLIGHTS

HEVC(H.265)/AVC(H.264) Encoder and Decoder

12G-SDI/HDMI2.0 Input/Loop out

2-channel stereo audio from 12G-SDI/HDMI2.0

UDP, RTMP protocol

Up to 4k@60 resolution input and output

Simultaneous encoding and decoding with a max aggregated

Recording and playback prerecorded video

Capture, encode and transmitting side latency 11ms

Receive, decode and display latency 9ms

Collective point to point latency below 100ms

video encryption and decryption

SPECIFICATIONS

Hardware	
Video Interfaces	
Input interfaces: 12G-SDI/HDMI2.0	
Output interfaces: 12G-SDI/HDMI2.0/DP1.2/Loop out	
Connectivity	
Gigabit Ethernet x2	
Storage	
USB3.0 x2	
M.2 SSD x1	
Power Input and Operating Temperature	
12V, 5A AC 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	
Resolution Support	
12G-SDI/HDMI2.0 up to 3840x2160p 60	

DP1.2 up to 3840x2160p 30	
Encode/Decode	
H.264/H.265	
Audio	
12G-SDI/HDMI2.0 Built-in Audio	
Protocol support	
UDP, RTMP	
**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	
Bitrate and profile configuration	
Rescaling input resolution	
Synchronized Audio and video	
Control & Monitoring through web browser	

ULL Streamer and Recorder connection/communication

iWave Systems Technologies, established in 1999, focuses on Product Engineering Services involving Embedded Hardware, Software & FPGA. The company designs and develops cutting edge products and solutions. iWave has been an innovator in the development of highly integrated, high performance, low power and low cost System On Modules and Development Platforms.

iWave System has won the confidence of its customers over the years by being a reliable partner in developing innovative products. Our engineers combine outstanding System design experience to deliver Quality Solutions. iWave specializes across Industrial, Automotive and Medical domains. We support our customers by being time efficient, which in turn helps our customers accelerate time to market their products. iWave is a Windows embedded Silver partner and a winner of the Partner Excellence Award.

Optional items not included in the standard deliverables.

Note: iWave reserves the right to change these specifications without notice as part of iWave continuous effort to meet the best in breed specification. The registered trademarks are proprietary of their respective owners.

ULL Streamer and Recorder
The device can be ordered online from the iWave Website