

Standalone HD-SDI H.264 Video Recorder and Streamer

## SD-1737HW

The SD-1737HW is an intelligent, stand-alone, H.264 Streaming solution that accepts a HD-SDI input at up to 1080p30 and encodes and streams over 100/1000MBit Ethernet. The SD-1737HW solution is ideal for demanding applications in Military, Airborne, UAVs, Navy Communications, Armoured and Tracked Military Vehicles.



The flexible streaming engine can stream the compressed video direct from the on-board Ethernet port as well as save directly to local storage for later retrieval.

Stereo audio embedded in the input HD-SDI source can also be captured and streamed, synchronized with the video.

Designed for mobile, UAS and Vetrnix applications, the SD-1737HW supports extraction of KLV (MSB 0605.3 compliant) embedded data contained within the HD-SDI that can be synchronized and streamed with the compressed video.

The SD-1737HW also features optional on-board Controller Area Network (CAN), 3-Axis Accelerometer, High sensitivity GPS receiver, Altimeter, and 3-Axis Digital Magnetometer (e-compass). These can integrate with other vehicle systems and data from these sources can be used as meta data embedded within the video and streamed to clients or saved for later analysis.



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Standalone HD-SDI H.264 Video Recorder and Streamer

## SD-1737HW

The SD-1737HW is an intelligent stand-alone device with its own on-board CPU and does not require a host CPU or any driver or OS software.



Real-time  
transmission of  
High quality video,  
Audio,  
and  
Synchronized  
metadata

### **Applications**

Unmanned vehicles (UAV, ROV)

Rugged video recorders for marine, aviation

Situational Awareness

Remote Video Surveillance

Border Security

Traffic Monitoring and Control

Video Acquisition and Analytics

Solid state multi-channel video and sensor recorders

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## SD-1737HW

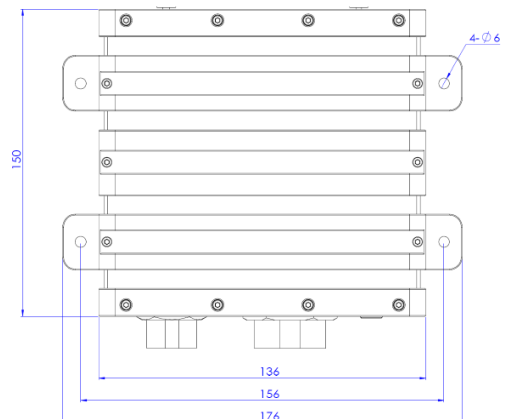
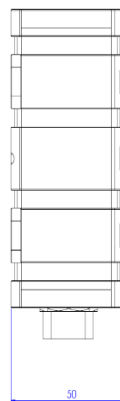


**SD-1737HW**

### Features

- 1x HD-SDI input up to 1080p30
- Real-time HD H.264 encode at 1080p30
- Stereo audio capture from HD-SDI
- Single board capture, encode, stream solution
- RS-485 port for simple control of recording
- USB 2.0 OTG support for extended local storage
- Low power operation for long endurance
- Stand-alone operation
- Operating system neutral
- Optional CAN, GPS, Altimeter, Accelerometer, Compass

Ideally suited to  
the demanding  
applications, space  
requirements and  
environmental  
conditions of  
Military,  
Transportation,  
Mining and  
Energy Industries



## SD-1737HW

### HD-SDI Video Input

Flexible Capture at up to 1080p30

### Audio Input

Embedded Audio captured from HD-SDI input  
Provides Audio/Video synchronisation

### H.264 Video Encoding

ITU-T H.264 (ISO/IEC 14496-10), supported profiles:

- Baseline profile,
- Main profile (I,P frame coding only)
- High profile (I, P frame coding only) at level 4.1

Up to 1080p30 encode  
CAVLC and CABAC coding  
Supports Variable Bit Rate (VBR)  
Supports Constant Bit Rate (CBR)

### JPEG Encoder

JPEG (ISO/IEC 10918-1)  
Baseline JPEG with JFIF support

### Network interface

100/1000MBit Ethernet  
Optional WiFi

### Vetronix Features

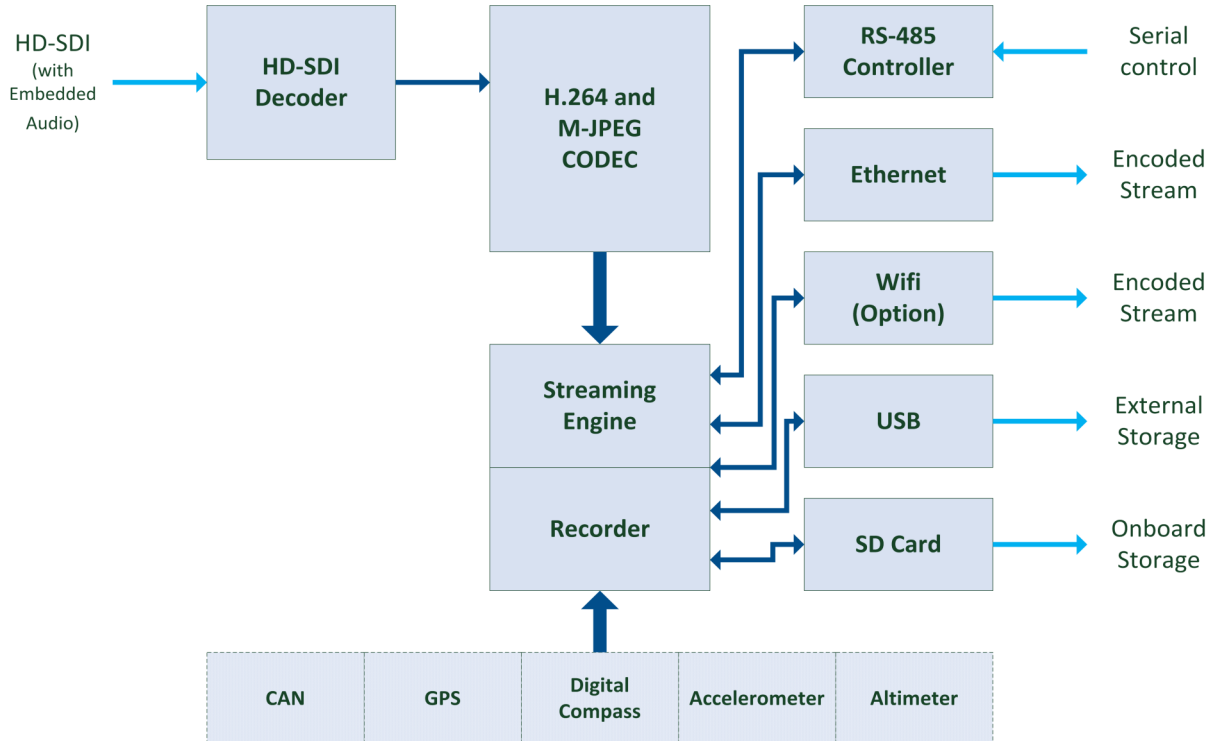
- KLV metadata support (optional)
- RS-485 - For simple control of recording
- USB2.0 OTG - For external storage
- SD-Card slot - On-board storage
- CAN2.0B port - For vehicle networks (option)
- High-sensitivity GPS (option)
- 3-axis Digital Magnetometer for eCompass (option)
- 3-axis Accelerometer (option)
- High sensitivity altimeter (option)

### Mechanical

Intelligent stand-alone module, does not require host computer  
Operating temp -40°C to +85°C

### Ordering Information

**SD-1737HW** H.264 HD Video Streamer (-40°C to +85°C)



**SD-1737HW Functional Diagram**