The StreamCorder-HD-SDI 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 single board solution is ideal for demanding applications in Military, Communications, Transportation, mining and Energy industries.

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 Vetronix applications, the StreamCorder-HD-SDI 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 StreamCorder-HD-SDI 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. The StreamCorder-HD-SDI 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. For mechanical convenience the module can be mounted on a PCIe104 stack without consuming host CPU resources.

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Subject to change without notification

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

StreamCorder-HD-SDI

Stand-alone HD-SDI H.264 Video Recorder and Streamer

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
Standard PCIe104 mechanical form factor
Optional CAN, GPS, Altimeter, Accelerometer, Compass

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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

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
Standard 3.6 x 3.8in PCIe104 form factor
Mechanical mounting for PCIe104 stack
Single +5V supply
Operating temp -40˚C to +85˚C

Ordering Information
STREAMCORDER-HD-SDI-EXT
H.264 HD Video Streamer (-40˚C to +85˚C)
STREAMCORDER-HD-SDI-VK-EXT
H.264 HD Video Streamer with KLV & Vetronix (-40˚C to +85˚C)