

H.264 & HEVC Internet Media Encoders/Transcoders

Available as a small form factor portable appliance, on-premise server or 4K appliance, the KB Series of H.264 & HEVC Internet Media Encoders and Transcoders provides you with multiple options for live event streaming, helping you deliver the highest quality live video to your global Internet audience.

Best Viewing Experience on Every Device With KB, you can encode/transcode video up to 1080p to distribute as a cascade of adaptive bitrate RTMP/HLS/MPEG-DASH streams across the world's largest CDNs, giving you the highest quality per bit and giving your Internet audience the best viewing experience regardless of their geographic location, network conditions or preferred device.

Get the Most Out of your Uplink Connection to the Cloud When your Internet connection at the source isn't very reliable, and bandwidth is limited, simply send your video streams to a transcoder in the cloud to take care of adaptive bitrate (ABR) distribution. With support for HEVC and Haivision's SRT (Secure Reliable Transport) technology, the KB Series uses up to 50% less bandwidth than H.264, and makes low-cost, readily available public Internet connections secure and reliable for live video transport from the source to the cloud, getting the most out of your available uplink bandwidth.

Flexible Deployment Options The KB Series offers flexible deployment options for every live event streaming scenario:

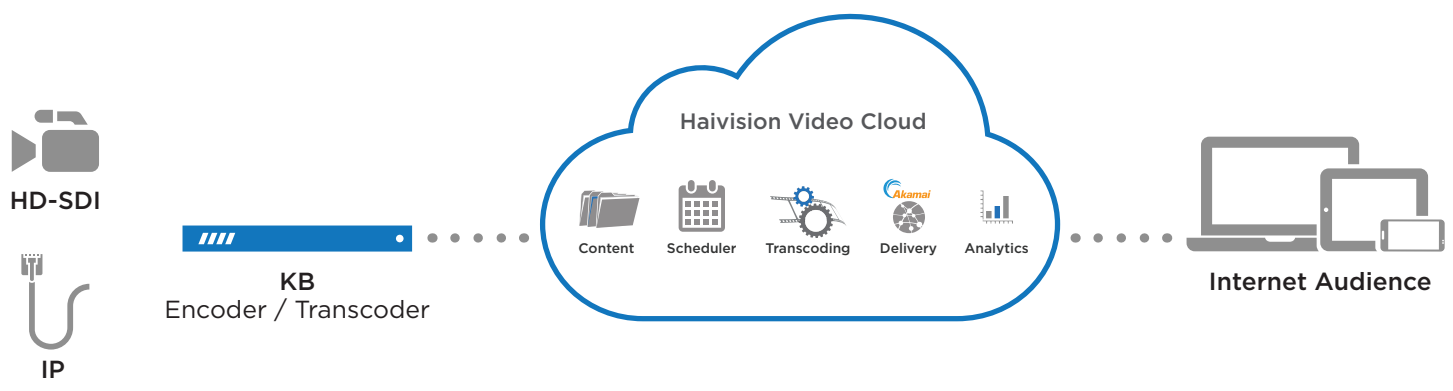
- The **KB Mini Encoder/Transcoder** is a portable all-in-one H.264/HEVC encoder, ideal for live event streaming from anywhere with an Internet connection. Leveraging Intel CPU and GPU hybrid processing, the KB Mini gives you big power in a small form factor appliance.
- A rackmountable server, the **KB Encoder/Transcoder Server** features redundant power supplies, RAID configurations and supports multiple channels. The KB Encoder/Transcoder Server is ideal for enterprise-grade internet streaming and fits within your existing enterprise infrastructure.
- The **KB 4K Encoder/Transcoder** has all the benefits of the KB Encoder/Transcoder Server, with hardware accelerated HEVC encoding to fuel the highest quality streaming events, supporting up to 4K H.264/HEVC viewing experiences.

Features

Benefits

HEVC Encoding/Transcoding	High efficiency video compression over constrained networks for live events contribution
ABR H.264 Encoding/Transcoding	Seamless viewing experience at the player level with dynamic bitrate/resolution adjusting
SRT (Secure Reliable Transport)	AES encrypted, packet loss resilient live video transport from source encoder to cloud hosted transcoder
Extensive CDN Support	Ensure reliable streaming over Akamai, Limelight and other Adobe and Wowza-based services
608/708 Closed Captioned	Support digital television closed captioning standards

<p>KB ENCODER/TRANSCODER SERIES Linux-based, optimized for 64-bit computing and multicore processing</p> <p><i>Validated CDNs:</i> Akamai HD2 network qualified Limelight (StreamAnywhere and MMDLive) CDN providers using Adobe Media Server (AMS) CDN providers using Wowza servers (with or without secure URL param authentication) and more</p> <p>Video Encoding <i>Video Encoding/Compression Standard:</i> H.264, HEVC/H.265 <i>Video Input Compression/Decoding:</i> MPEG-2, H.264 and HEVC</p> <p><i>Profiles:</i> H.264: High, Main, Baseline HEVC: Main</p> <p><i>Bit Rates:</i> up to 50Mbps</p> <p><i>Rate Control:</i> CBR</p> <p><i>Video Sampling:</i> up to 4:2:2</p> <p>Audio Encoding <i>Compression Standard:</i> AAC-LC/HE</p> <p><i>Bit Rates:</i> up to 512 Kbps</p> <p>Network Outputs SRT/M2TS RTMP HTTP Live Streaming (HLS) HLS DASH UDP (Unicast/Multicast)</p> <p>File Output H.264 MP4 HEVC MP4</p>	<p>KB MINI H.264 & HEVC SD/HD ENCODING/TRANSCODING APPLIANCE <i>Video/Audio Inputs:</i> One baseband HD-SDI or HDMI capture up to 1080i59.94 or 1080p30 16 channels of audio One IP H.264 or HEVC input support up to 1080p60</p> <p><i>Stream Outputs:</i> HEVC: Up to one 720p60 encode H.264: Up to three 1080p30 encode H.264 ABR cascade: Up to 1080p30 (1080p, 720p, 480p, 360p, 270p, 180p)</p> <p><i>Weight and Dimensions:</i> 4.52 lbs (2.1 kg) H: 1.69 in. (4.29 cm) W: 6.49 in. (16.48 cm) D: 7.48 in. (19 cm)</p> <p><i>Power:</i> One External 90W fanless power adapter</p> <p><i>Recording storage capacity</i> 180 GB</p> <p>KB HD ENCODER/TRANSCODER SERVER <i>Video/Audio Inputs:</i> Up to four 3G-SDI or IP video inputs supporting up to 1080p60 per input 8 channels of audio per input</p> <p><i>Stream Outputs:</i> HEVC: Up to one 1080p30 encode per input or H.264: Up to one 1080p60 encodes per input or H.264: ABR Cascade, Up to one 1080p60 encodes per input (1080p, 720p, 480p, 360p, 270p, 180p) per input</p> <p><i>Weight and Dimensions:</i> 36.88 lbs (16.73 kg) H: 1.68 in. (4.28cm) W: 18.98 in. (48.24cm) D: 27.57 in. (60.7cm)</p> <p><i>Power:</i> Dual power 550W</p> <p><i>System:</i> 1RU server with redundant power supply and RAID-protected, hot-swappable hard drives.</p> <p><i>Audio/Video capture card:</i> Two x Network Interfaces (NIC)</p> <p><i>Recording storage capacity</i> 400 GB+</p>	<p>KB 4K ENCODER/TRANSCODER <i>Video/Audio Inputs:</i> Four 3G-SDI or IP video inputs supporting one 2160p60 channel (or up to four 1080p60 channels) 16 channels of audio per input</p> <p><i>Stream Outputs:</i> <i>With one 4K UHD input:</i> HEVC: Up to one 2160p60 encode H.264: Up to one 2160p30 encode H.264 ABR cascade: Up to 1080p30 (1080p, 720p, 480p, 360p, 270p, 180p) <i>With up to four 1080p60 inputs:</i> HEVC: Up to one 1080p60 encode per input H.264 ABR cascade: Up to 1080p30 (1080p, 720p, 480p, 360p, 270p, 180p) per input</p> <p><i>Weight and Dimensions:</i> 37 lbs (16.9 kg) H: 1.68 in. (4.28 cm) W: 18.98 in. (48.23 cm) D: 27.57 in. (70.05 cm)</p> <p><i>Power:</i> Dual power 495W</p> <p><i>Recording storage capacity</i> 400GB+</p>
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KB Product Portfolio & Ordering Information **

KB Mini	S-KB-SFF-1	H.264 & HEVC SD/HD Encoding/Transcoding Appliance - Small Form Factor
KB Encoder/Transcoder Server	S-KB-1/2/4	KB Enterprise Class H.264 & HEVC SD/HD
KB 4K Encoder/Transcoder	S-KB-4K	KB Enterprise Class UHD Encoding/Transcoding Appliance

** For complete pricing and ordering, contact us at sales@haivision.com or your certified Haivision reseller.