

Channel Control Center

Welcome admin@log.tvt



In: 60.5730 Mbps

Out: 30.0623 Mbps

Select Filter

Camera 1



REC

Hide Meters

In
225.21 Mbps

Out
106.41 Mbps



Elapsed Running Time: 04h11m03s

Camera 2



Hide Meters

In
31.72 Mbps

Out
15.39 Mbps



Elapsed Running Time: 00h12m38s

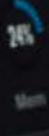
Feed 01



Hide Meters

In
28.19 Mbps

Out
16.41 Mbps



Elapsed Running Time: 13072h43m17s

Haivision

KB Series

Professional Encoding and Transcoding Solutions from Haivision



H.264 & HEVC Internet Media Encoders/Transcoders for Powerful Live Event Streaming

The KB series of H.264 & HEVC Internet Media Encoders and Transcoders deliver high-quality video streaming for resolutions up to 4K, available as small form factor portable appliances as well as rackmountable enterprise-grade servers. The KB series provides you with multiple options for live event streaming, helping you deliver the highest quality live video to your global internet audience.

ABR Cascades & Hardware Acceleration The KB series of ABR encoders/transcoders maximizes computational resources to offer real-time H.264 or HEVC encoding and adaptive bitrate (ABR) cascades for video resolutions up to 4K/UHD 2160p. These resolutions can be distributed as ABR cascades in RTMP/HLS/MPEG-DASH across the world's largest CDNs, providing your internet audience with 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, your end viewer experience may be compromised - what they see is only as good as what you send. The KB encoder can solve this problem by sending a single bitrate stream - at the highest quality possible - to a transcoder in the cloud for ABR distribution. With support for HEVC, KB uses up to 50% less bandwidth than H.264. Additionally, Haivision's SRT (Secure Reliable Transport) technology makes low-cost, readily available public internet connections secure and reliable for live 1st mile contribution from the source to the cloud, getting the most out of your available uplink bandwidth.

Easy Live Streaming with All Major Platforms The KB series pairs seamlessly with cloud service providers, online video platforms and CDNs. Now Azure certified, KB helps users reach global internet audiences with Microsoft's Azure Media Services. Depending on your broadcast needs, KB can be configured to send a single bitrate or multi-bitrate stream to the cloud for distribution. KB also helps Workplace users make it easy to securely and reliably live stream meetings and presentations to all Workplace colleagues, wherever they may be located. Just plug in the live video feed, connect to the internet, and start streaming!

Power High Quality Live Events with 360-degree VR Streaming Bring your remote viewing experience to life with virtual reality and 360-degree streaming. By incorporating 360-degree virtual reality cameras into your 4K workflow, your audience's experience becomes immersive with VR goggles or a media player with 360 support for viewing.

Features

Benefits

H.264/HEVC Encoding/Transcoding	High efficiency video compression over constrained networks for live events contribution
H.264/HEVC ABR Cascades	Seamless viewing experience at the player level with dynamic bitrate/resolution tuning
SRT Protocol	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 Captioning	Support digital television closed captioning standards
Small Form Factor (option)	High powered processing in a portable appliance with the KB Mini and KB Max
360-degree Virtual Reality (option)	Power virtual reality viewing experiences with the KB 4K and KB Max

KB MINI H.264 & HEVC



KB MAX ENCODER/TRANSCODER



KB SERIES USER INTERFACE



Flexible Deployment Options

The KB series offers flexible deployment and hardware acceleration options for every live event streaming scenario:

- The award-winning **KB Mini Encoder/Transcoder** is a portable all-in-one H.264/HEVC encoder, that's easy to setup and is ideal for live event streaming from anywhere with an internet connection. Also, with direct Wifi control, users can quickly configure their network settings right from their laptop. Leveraging Intel CPU and GPU hybrid processing to deliver H.264/HEVC cascades up to 1080p, the KB Mini gives you big power in a small form factor appliance.
- The **KB Max** offering 4K 360-degree virtual reality capabilities in a portable, small form factor appliance make it suitable for on-the-go live events and non permanent installations.
- As a rackmountable server, the **KB Encoder/Transcoder Server** features redundant power supplies, RAID configurations and support for up to four 1080p video input 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 Server** has all the benefits of the KB Encoder/Transcoder Server. Supporting up to 4K viewing experiences and hardware accelerated HEVC encoding, the KB 4K can fuel the highest quality live streaming events.

Rackmount Options for the KB Mini Appliance The KB series servers are rackmountable, and if you need to mount your KB Mini appliance in the machine room, 1RU rackmount options for either one or two KB Mini units are available.



KB MINI RACKMOUNTS - ONE UNIT, TWO UNITS

KB Workflow



KB ENCODER/TRANSCODER SERIES	KB MINI H.264 & HEVC SD/HD ENCODING/TRANSCODING APPLIANCE	KB 4K ENCODER/TRANSCODER SERVER
Linux-based, optimized for 64-bit computing and multicore processing	<i>Video/Audio Inputs:</i> One baseband HD-SDI or HDMI capture up to 1080p30, with up to 16 channels of embedded audio One IP H.264 or HEVC input support up to 1080p60	<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
The following technical specifications apply to all products within the KB series of H.264 & HEVC Encoders and Transcoders.	<i>Stream Outputs:</i> H.264/HEVC: 1080p30 ABR cascade encode (1080p, 720p, 480p, 360p, 270p, 180p)	<i>Stream Outputs:</i> With one 4K UHD input: HEVC: Up to one 2160p60 encode H.264: Up to one 2160p30 encode
Stream Inputs	<i>Weight and Dimension:</i> 2.49 lbs (1.13 kg) 1.41" H x 7.16" W x 7.01" D (3.6 cm H x 18.2 cm W x 17.8 cm D)	<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
Validated CDNs	<i>Power:</i> 1x External 90W fanless power adapter	<i>Weight and Dimensions:</i> 36.9 lbs (16.7 kg) 1.68" H x 18.98" W x 27.57" D (4.3 cm H x 48.2 cm W x 70.1 cm D)
Akamai Certified for RTMP/HLS/MPEG-DASH Limelight (StreamAnywhere and MMDLive) CDN providers using Adobe Media Server (AMS) Azure Media Services (AMS) CDN providers using Wowza servers (with or without secure URL param authentication) and more	<i>Recording storage capacity:</i> 160 GB	<i>Power:</i> Dual power 495W
Video Encoding	KB HD ENCODER/TRANSCODER SERVER	<i>Recording storage capacity:</i> 400 GB
<i>Video Encoding/Compression Standard:</i>	<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	KB MAX ENCODER/TRANSCODER APPLIANCE
H.264, HEVC/H.265	<i>Stream Outputs:</i> HEVC: Up to one 1080p30 encode per input Or H.264: Up to one 1080p60 encode per input Or H.264 ABR cascade: Up to one 1080p30 encode per input (1080p, 720p, 480p, 360p, 270p, 180p)	<i>Video/Audio Inputs:</i> One 12G-SDI or four 3G-SDI or one HDMI or IP video input supporting one 2160p60 channel (or up to four 1080p60 channels for SDI or IP) 16 channels of audio per input
<i>Video Input Compression/Decoding:</i>	<i>Weight and Dimensions:</i> 36.9 lbs (16.7 kg) 1.68" H x 18.98" W x 27.57" D (4.3 cm H x 48.2 cm W x 70.1 cm D)	<i>Stream Outputs:</i> With one 4K UHD input: HEVC: Up to one 2160p60 encode H.264: Up to one 2160p60 encode
MPEG-2, H.264 and HEVC	<i>Power:</i> Dual power 550W	<i>With up to four 1080p60 inputs:</i> HEVC: Up to one 1080p60 encode per input H.264: Up to one 1080p30 encode per input
<i>Profiles:</i>	<i>System:</i> 1RU server with redundant power supply and RAID-protected, hot-swappable hard drives	<i>With up to two 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
H.264: High, Main, Baseline	<i>Audio/Video capture card:</i> 2 Network Interfaces (NIC)	<i>With up to one 1080p60 input:</i> HEVC: Up to 1080p60 (1080p, 720p, 480p, 360p) H.264 ABR cascade: Up to 1080p60 (1080p, 720p, 480p, 360p, 270p, 180p)
HEVC: Main	<i>Recording storage capacity:</i> 400 GB	<i>Weight and Dimensions:</i> 5 lbs (2.3 kg) 1.75" H x 8.5" W x 10.5" D (4.4 cm H x 21.6 cm W x 26.7 cm D)
<i>Bit Rates:</i>		<i>Power:</i> 1x External 120W fanless power adapter
up to 50 Mbps		<i>Recording storage capacity:</i> 160 GB
Rate Control:		Software version 5.3
CBR		
<i>Video Sampling:</i>		
up to 4:2:2		
Audio Encoding		
<i>Compression Standard:</i>		
AAC-LC/HE		
<i>Bit Rates:</i>		
up to 512 Kbps		
Stream Outputs		
Network Outputs Protocols		
SRT/M2TS		
RTMP		
HTTP Live Streaming (HLS)		
MPEG-DASH		
UDP (Unicast/Multicast)		
File Outputs		
H.264 MP4		
HEVC MP4		

KB Product Portfolio & Ordering Information **

KB Mini H.264 & HEVC SD/HD Encoding/Transcoding Appliance	S-KB-SFF2-1	SDI or HDMI capture up to 1080p30 (in a small form factor appliance)
KB Encoder/Transcoder Server	S-KB-1/2/4	1, 2, or 4 SDI or IP capture up to 1080p60. 1RU server
KB 4K Encoder/Transcoder	S-KB-4K	SDI or IP capture up to 1x 2160p60 or 4x 1080p60. 1RU server
KB Max	S-KB-SFF-4K	SDI, HDMI or IP capture up to 1x 2160p60 or 4x 1080p60 (in a small form factor appliance)
KB Mini Rackmount - Single Unit	RU-SFF-1	Rack mount for single KB Mini appliance
KB Mini Rackmount - Dual Unit	RU-SFF-2	Rack mount for two KB Mini appliances

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