9000 Series H.264 Encoding Appliance

The VBrick 9000 Series H.264 Encoding Appliance enables anyone to encode video from an uncompressed source - such as a camera or TV broadcast - and stream it live onto a network for viewing on PCs, MACs, tablets, televisions, or smartphones. The 9000 Series Encoding Appliance is the first portable device that streams 1080p60 HD video from multiple sources at the same time – and the first line of encoding appliances to support up to four channels of HD video.

Building upon more than a decade of experience engineering the most widely deployed enterprise encoders, the 9000 Series sets a new benchmark in H.264 encoding performance. Based on purpose-built hardware and running a real-time operating system, this unique appliance approach combines encoding, networking, stream serving and recording functions to deliver unmatched price-performance and ease-of-use.

Applications

Television Distribution Deliver selected television channels – including news and financial programming – to an unlimited number of desktops and displays across your existing LAN, WAN or IP network. There is no need for extra cabling or a dedicated network and you can reduce TV headend rack space by 75%.

Telemedicine Use the most advanced encoding standards, highest resolution, and highest frame rate available to watch intricate operations and other medical procedures – applications where image quality cannot be compromised.

Surveillance and Monitoring Oversee roadways, seaports, factory floors and security borders; survey battlefield situations and maintain situation awareness with an unprecedented level of video quality ensuring access to detailed and accurate information.

Digital Signage Deploy signage economically by encoding the content once and distributing over your network to cost-effective set-top boxes. Feed an unlimited number of digital signs with four different HD sources using a single encoding appliance.

Meeting and Event Broadcasts Deliver high-impact rich media event broadcasts. Reach a large audience of customers, constituents, employees and others over the corporate network and the Internet to communicate a uniform message.

Features and Benefits

Capture High Definition Video Appliances encode and stream HD 720p and 1080p video at 60 frames-per-second, the highest frame rate available from standard video sources. This provides incredible video quality at bandwidths of 1 Mb/sec and up.

Capture Multiple Video Sources on a Single Appliance Dual-channel and quad-channel models simultaneously encode and stream HD video from multiple sources in a single appliance, leading to economical deployments and space savings of up to 75%.

Manage the Appliance Easily and Securely Control and Monitor the appliance with VBrick's iPhone application. Integrate into any IT infrastructure with a rich set of management protocols and options that let you manage, configure and lock down the H.264 appliance. Use VBrick's VBAdmin tool to configure and monitor the appliance. Use command line interface over Telnet, SSH, or serial port to configure the appliance. Manage programmatically and integrate into other systems such as room.

Product at a Glance

- Stream H.264 SD and HD video over any network, to any device, at resolutions up to 1080p60
- Capture up to four channels of video in a single portable appliance, streaming all channels at resolutions up to 1080p.
- Integrates with VEMS Mystro and is a key component of the VBrick Enterprise Video Architecture (VEVA). Deliver video to various video players including iPhones and iPads, Adobe Flash Player, Microsoft Silverlight and more.

MODELS

HPS 9000 HD High Definition Encoding appliance available in one, two, or four channel models

XPS 9000 SD Standard Definition Encoding appliance available in one, two, or four channel models

Ein Vertriebsprodukt von:
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9000 Series H.264 Encoding Appliance

Features and Benefits

Transport Video Over a Wide Variety of Network Transport Protocols
Video streams are compatible with Adobe Flash™ Player, Microsoft Silverlight, Microsoft Windows Media™ Player, Apple QuickTime and other players. Network friendly operation – meaning everything from streaming with the most appropriate bit rates to the inclusion of advanced features like persistent push – allows VBrick H.264 streams to tunnel through firewalls and traverse any network.

Integrate into a Complete Enterprise IP Video Platform VBrick's H.264 appliance works seamlessly with our VEMs Mystro ™ media management solution and the entire VBrick Enterprise Video Architecture (VEVA). By making video accessible, personal and scalable, VEMS Mystro eliminates multiple barriers to the adoption of enterprise IP video.

Multicast, Unicast and Serve from the Same Device Use multicast technology to reach an unlimited number of users on your LAN or push video over point-to-point unicast connections to reach remote locations and CDNs. Serve and support hundreds of players that request video directly from a single appliance.

Specifications

Video Encoder (Standard Definition)
- H.264 Encoding
  - Input format: 1080p60, 1080i, 720p60, 576i, 480i over HDMI or Component Video
  - 4:3 Aspect Ratio Resolutions: D1 (720x480, 720x576), SIF (NTSC), QSIF (NTSC), CIF (PAL), QCIF (PAL), 400x304, 384x288 (PAL), 640x480, 320x240, 128x96, 192x144
  - 16:9 Aspect Ratio Resolutions: 656x368, 512x288 (PAL), 256x144
  - Video Frame Rates: 0.5, 1, 2, 3, 5, 6, 7.5, 10, 15, 30 fps (NTSC), 0.5, 1, 2.5, 5, 12.5, 25 (PAL)
  - Constant Bit Rate / Constant Frame Rate
  - User-defined key frame interval
  - Rates: 32Kbps – 20Mbps
  - Baseline, Main, and High profile
- Inputs: HDMI and Component
- Rate control
- Deblocking filter

Video Encoder (High Definition)
- H.264 Encoding
  - High Definition input formats: 1080p60, 1080i, 720p60
  - 16:9 Aspect Ratio Resolutions: All standard definition resolutions listed above, plus 960 x 544, 720p (1280 x 720p), 1080p (1920 x 1080)
  - Video Frame Rates: 0.5, 1, 2, 3, 5, 6, 7.5, 10, 15, 30 fps (NTSC), 0.5, 1, 2.5, 5, 12.5, 25 (PAL), 50, 60 fps
  - Constant Bit Rate / Constant Frame Rate
  - User-defined key frame interval
  - Rates: 32Kbps – 20Mbps
  - Baseline , Main, and High profile
- Inputs: HDMI and Component
- Rate control
- Deblocking filter

Audio Encoder
- AAC-LC and AAC-HE Encoding
  - Sample Frequency 8 Khz to 48 Khz
  - Rates: 8 Kbps to 256 Kbps
  - Audio Modes: Stereo, Mono
  - Inputs: Stereo Unbalanced at line, microphone or high headroom input levels, and microphone via analog audio inputs. Digital audio can also come through the HDMI input.
  - Audio Processing:
    - Automatic Volume Control (AVC) with configurable attack and release rates and minimum/maximum levels.
    - Noise Gate with configurable threshold.
    - Configurable gain from -96dB to 10dB.

Push
- RTMP to Flash Media Server
- IIS Smooth Streaming to Microsoft IIS Server
- 25 concurrent unicast and multicast destinations
- Automatic Unicast/RTSP Announce

Server
- Live multicast server
- Live streaming server - up to 200 concurrent live streams

Ethernet Network
- 10/100/1000 Mbps Ethernet via RJ-45, Static, or DHCP
- Auto sense Full / Half duplex

Protocols
- Unicast / Multicast, DiffServ (QoS), UDP / IPv4 and IPv6 / RTSP / RTCP / RTP / HTTP / RTSP Interleave / IGMP / MPEG-2 Transport Stream / Automatic Unicast (RTSP ANNOUNCE) / HTTPS Management / SSH / RTMP / IIS Smooth Streaming

Traffic Shaping
- RTP Metering
- CBR Transport Stream
- VBR Transport Stream with configurable latency

Protocols Unicast / Multicast, DiffServ(QoS) / UDP / IPv4 and IPv6 / RTSP / RTCP / RTP / HTTP / RTSP Interleave / IGMP / MPEG-2 Transport Stream / Automatic Unicast (RTSP ANNOUNCE) / HTTPS Management / SSH / RTMP / IIS Smooth Streaming

Maintenance/Control Port Two serial ports for local maintenance and data transport

Dimensions Appliance: 1.75" x 8.1" x 8.75"

Weight 2 pounds

Temperature Range Operating: 0° to +70° Celsius

Power Input: 100 to 240 VAC, 50 / 60 Hz, 45 Watts, 12V DC, 4A

Regulatory FCC Part 15, CE

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