VBrick APPLIANCE
WM APPLIANCE

Industry leading networked video appliances

Delivering Windows Media® video and audio has never been easier. Whether it's corporate training, a new product launch, or a dean's speech at graduation, VBrick's WM Appliance enables video delivery over your enterprise network or the Internet.

Capabilities

VBrick's WM Appliance is based on the award winning VB6000 platform and provides multiple capabilities in one portable and reliable appliance.

Encoding – Digitizing and compressing a video signal for delivery over an IP network

Serving – Serve up to 200 live unicast streams or 20 on-demand streams

Multicasting – Multicast a live video directly from the appliance

Pushing – Push up to 25 simultaneous streams to VBricks or Windows Media® Servers

Reflecting – Receive a live stream over the network and deliver it locally via unicast or multicast

The Reflector functionality allows a WM Appliance to receive video over a low bandwidth link and retransmit onto a local area network. This important feature allows the VBrick to bridge low bandwidth bottlenecks by only delivering one video stream over the low bandwidth link and then delivering video to multiple end users at the far end.

Recording – Record video that is being encoded or received over the network (requires optional hard drive)

Remote Management – Complete remote configuration and management solution via SNMP, or enable automated configuration download via periodic configuration polling

Multi Bit Rate (MBR) Endoding – Each encoder can support up to 3 video and 3 audio rates

16:9 Support – Video can be encoded and streamed in native 16:9 resolution for widescreen display

Closed Captioning Support – Captioning infromation can be encoded with the video or users can insert captioning information in real time

Benefits

- Integrates seamlessly into existing Windows Media® deployments
- Combines multiple capabilities into a single appliance
- Easy to configure and use – streaming in a matter of minutes
- Streams to publishing points via push or pull
- Portable solution is ideal for webcasting special events
- Much lower delay (3-5 seconds) than with PC based systems
- No desktop download necessary – streams directly to Windows Media® Player

Models

Windows Media®

9190-4200 – Single Channel Encoder

9190-4300 – Dual Channel Encoder

Windows Media®/MPEG-2

9180-4300 Dual Channel Multi-Format Encoder

9180-6200 Dual Channel Transcoder (Windows Media Encoder/MPEG-2 Decoder)

Windows Media®/MPEG-4

9150-4300 Dual Channel Multi-Format Encoder

Windows Media® Options

SDI inputs
Hard Drive

Compatibility

- IGMP v3
- SNMP v3
- Windows Media® Player
- Microsoft Silverlight Player - NEW
- StreamPlayer WM for Mac and Linux - allows Windows Media video and audio (including multicast) to be displayed on Macs and Linux PCs

Interoperability

- EtherneTV Suite – Portal Server, Scheduler, and Network Video Recorder
- EtherneTV WM IPR - low cost Windows Media video decoding
- VBrick VOD-WM Windows Media® Video On-Demand Server
- VBrick Audiomate microphone

Features and Specifications

Video Encoder
- WM9 Encoding
- Format: NTSC, PAL
- 4:3 Aspect Ratio Resolutions: 640 x 480, 640 x 240, 320 x 480, 512 x 384, 400 x 300, 320 x 240, 240 x 180, 160 x 120
- 16:9 Aspect Ratio Resolutions: 640 x 360, 640 x 180, 384 x 216 (NTSC only), 512 x 288 (PAL only), 256 x 144, 128 x 72
- Video Frame Rates: 1, 7.5, 10, 15, 30 fps (NTSC) 1, 5, 10, 12.5, 25 (PAL)
- Constant Bit Rate / Constant Frame Rate
- Constant Bit Rate / Variable Frame Rate
- User defined key frame interval
- Rates: 20 Kbps - 4 Mbps
- Closed caption, Line 21 Passthrough, or user inserted
- Multi Bit Rate (MBR) encoding – up to three profiles
- Metadata insertion and scripting
- JPEG image capture - Capture JPEG images every 1 to 600 seconds
- Inputs: Composite or S-Video (SDI optional)

Audio Encoder
- WM8 Encoding
- Sample Frequency 8 Khz to 48 Khz
- Rates: 5 Kbps to 192 Kbps
- Audio Modes: Stereo, Mono 1 (L+R), Mono 2 (Left only)
- Inputs: Unbalanced Input: Audio via Minijack. Balanced Input: Audio via Minijack or Microphone DIN

Push
- Up to 25 concurrent HTTP pushes to VBrick Appliances or Windows Media® Servers

Server
- Live multicast server
- Live streaming server - up to 200 concurrent live streams
- On-demand server - up to 20 concurrent on demand streams

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

Reflector
- Receive a stream over the network and retransmit

Protocols
- Unicast / Multicast, DiffServ (QoS), UDP / IP / RTSP / HTTP / ASF

Maintenance Port
- Serial port for local maintenance or data transport

Control Port
- Serial port for data transport

IR Remote Control
- IR Remote Control for local control and configuration

Dimensions
- W 8.75" x H 2.3" x D 12.5" (W 22.2 cm x H 5.8 cm x D 31.7 cm)

Weight
- Approx. 3.2 Kg (7 lbs)

Temperature Range
- Operating: 0˚ to +70˚ Celsius, operating humidity up to 90% non-condensing
- Non-operating: -10˚ to +70˚ Celsius

Power Supply
- Input: 100 to 240 VAC, 50 / 60 Hz, approximately 55 Watts Output: +24V up to 3.0A

Regulatory
- FCC Part 15, UL, CE

Relay
- Dry contact, 75mOhms, 2A @ 30VDC, 0.3A @ 110VDC, 0.5A @ 125VDC

LCD
- 32 Character display (16x2), backlit

LED Status
- Power In (24VDC), Activity, Link, 10/100

SDK
- Allows third party developers and integrators to create custom applications and systems that incorporate video

VBrick's Network Video Appliances are renowned for their reliability, functionality, low delay, and ease of use. The VBrick WM Appliance can be used as a stand-alone video delivery device, or can be deployed as an integrated component of VBrick's award winning EtherneTV video delivery system. Additionally, the WM Appliance can be used in conjunction with VBrick's VBPresenter presentation software to provide an easy to deploy presentation system that synchronizes video from the WM Appliance with PowerPoint® slides and advanced features such as Q and A, polling, and guided web browsing.