

## MPEG-4 Codecs



## High Quality Video and Audio Over IP Networks

VBrick's MPEG-4 encoder/decoder is a versatile and reliable video appliance for one-way or two-way interactive communications over low or medium bandwidth IP networks. Available in a compact enclosure, the VBrick MPEG-4 encoder/decoder can be used for webcasting, multicasting, transcoding, and even two-way interactive video. This powerful, yet inexpensive product, can reach 1000's of people on your corporate network, VPN, or the Internet. It is ideal for distance learning, news distribution, event broadcast, product introductions, or video surveillance.

### Product Features

- **High quality video** using low bandwidth
- **Delivery** of Unicast and Multicast streams
- **Industry standard** RTP/RTSP/RTCP compliant
- **ISMA-MPEG-4** to ensure vendor interoperability
- **Wide range** of video resolutions and bit rates
- **Designed for 30 fps** high quality video
- **Constant or variable bit rate** and frame rate
- **Automatic channel guide**
- **Multi-level administration** security
- **Extensive automatic status** and diagnostics
- **Dual serial ports** for control of cameras
- **100% remotely managed**, configured, and maintained (SNMP, telnet, CLI)

### Encoder Features

- **Built-in video server** can serve 200 simultaneous users via standard RTSP
- **HTTP tunneling** to help reduce firewall issues
- **Closed captions** for hearing impaired (Sec. 508)
- **Stream metering** to optimize bandwidth over WAN lines

### Decoder Features

- **Automatic On Screen** display of available programs
- **Picture-in-picture** for two-way conferencing
- **Dynamic image enhancement** for best picture quality

### Interoperability

- **EtherneTV-MCS** Media Control Server - automatically recognizes encoded MPEG-4 streams and creates channel guide
- **EtherneTV-STB** Set Top Boxes - decode MPEG-4 streams from low cost set top boxes
- **EtherneTV-NXG** Video on Demand Server - capture MPEG-4 streams for future playback
- **StreamPlayer and StreamPlayer Plus** - software decoding for desktop PCs
- **SDK** - build custom applications

### Applications

- **Webcasting and News Distribution** - One way streaming for the delivery of corporate news, training, product announcements or events
- **Distance Learning** - Two-way Interactive always on conferencing using minimal bandwidth over IP networks
- **Surveillance** - Monitoring remote or sensitive locations and process monitoring

### Benefits and Advantages

- **Low video transmission delay** is ideal for two-way interactive applications
- **High quality streaming** at minimal bandwidth is ideal for IP based networks
- **Robust and reliable** appliance minimizes downtime and IT support
- **Streaming video lowers costs** by reducing travel time and maximizing productivity
- Portable network appliance design is **simple to set up and use with quick start templates**
- **Multiple player interoperability** (Windows, Real, QuickTime)\*
- **Automatic device discovery** for simple management
- **Audio only, video only** or audio/video broadcasting

### Models

- Single channel MPEG-4 encoder (9140-4200)
- Single channel MPEG-4 decoder (9140-5200)
- Dual channel MPEG-4 encoder (9140-4300)
- Dual channel MPEG-4 decoder (9140-5300)
- Dual channel MPEG-2/4 encoder (9130-4300)
- Dual channel MPEG-2 decoder/MPEG-4 encoder for transcoding (9130-6200)
- MPEG-4 encoder/decoder (9140-6200)
- Dual channel MPEG-2/MPEG-4 decoder (9130-5300)

\*May require plug-in



## SPECIFICATIONS

### System Encoder/Decoder:

<b>Video</b>	MPEG-4 - ISO/IEC 14496-2:1999			
	Supports NTSC, PAL (PAL-M*)			
	MPEG-4 Compliant Levels: Simple Profile	<b>Video Resolution</b>	<b>NTSC</b>	<b>PAL</b>
	Level 1 - up to 64 Kbps	SIF	352 x 240	N/A
	Level 2 - up to 128Kbps	QSIF	176 x 128	N/A
	Level 3 - up to 384 Kbps	CIF	N/A	352 x 288
	Video Rates: 1fps - 30 fps	QCIF	N/A	176 x 144
	Constant Bit Rate/ Constant Frame Rate	Custom	64 x 48	64 x 48
	Variable Bit Rate / Constant Frame Rate			
	Constant Bit Rate / Variable Frame Rate			
	User defined key frame interval			
	Rates: 8 Kbps - 2 Mbps			
	Inputs: Composite or S-Video			
<b>Audio</b>	MPEG-4 - ISO/IEC 14496-3:1999			
	Low Complexity AAC	Custom	128 x 96	128 x 96
	Sample Rates: 8Khz., 11.025Khz, 12Khz, 16Khz, 22.5Khz, 24Khz, 32Khz, 44.1Khz, 48Khz	Custom	192 x 144	192 x 144
	Sample Bit Rates: 8Kbps to 320Kbps with 2Kbps granularity	Custom	256 x 192	256 x 192
	Audio Modes: Dual Stereo - 2 inputs/2 outputs			
	Mid/Side coded stereo	Custom	352 x 240	320 x 240
	Mono1 - left input / left output			
	Mono2 - left input / left & right output	Custom	N/A	384 x 288
	Audio Inputs: Microphone DIN *, 1/8" mini connectors			
	Audio outputs 1/8" mini connectors **			
<b>Other</b>	Logo Display **			
	Deblocking, adaptive low pass, and deringing filters **			
<b>Ethernet Network</b>	10/100 Mbps Ethernet via RJ-45, Static or DHCP, Auto sense Full/half duplex			
<b>Protocols</b>	Unicast/Multicast, DiffServ (QoS), UDP / IP / RTP / RTSP / RTCP / HTTP/SNMP/TELNET			
<b>Maintenance Port</b>	Serial port for local maintenance or data transport			
<b>Control Port</b>	Serial port for data transport			
<b>IR Remote Control</b>	IR Remote Control for local control and configuration			
<b>Size</b>	5.8 cm (2.3 inches) High 22.2 cm (8.75 inches) Wide 31.7 cm (12.5 inches) Deep			
<b>Weight</b>	Approx. 3.2 Kg (7 lbs)			
<b>Temperature Range</b>	0 degrees to +70 degrees Celsius, operating humidity up to 90% non-condensing*			
<b>Power Supply</b>	Input: 100 to 240 VAC, 50/60 Hz, approx. 55 Watts Output: +24V up to 3.0A			
<b>Regulatory</b>	FCC Part 15, UL, CE			

\*High temperature operation has some dependencies, please contact VBrick.

\* Available on encoder only

\*\* Available on decoder only