

## High Quality Videoconferencing Codec



### Advantages of Conferencing with HD600

- 00 Custom integration design includes codec and extensive set of APIs
- 00 Incorporates HD Simulcast™ technology for advanced streaming capabilities
- 00 H.239 support allows users to share documents
- 00 Web-based manager makes the HD600 easy to control and administer
- 00 Emblaze-VCON Media Xchange Manager® management for advanced videoconferencing functions
- 00 Encryption support with H.235 (AES)



The HD600, Emblaze-VCON's new entry point in the visual communications market, is a high-performance videoconferencing codec for integration into a custom multimedia room environment. When combined with external audio mixers, video switches and touch-screen control devices, virtually any rich media communication solution can be created. The HD600 produces high quality video with extremely low latency at IP conferencing data rates up to 2 Mbps. With streaming capabilities and a suite of integration APIs, the HD600 can be used to create any custom application in an array of industries such as health care, large education facilities and corporate boardrooms. The life-like video and crisp, clear audio guarantee that meeting participants experience the convenience of effective videoconferencing.

### Streaming Video, Audio and Data

The HD600 incorporates multiple ways of streaming live videoconferences both over the corporate network and over the Internet. Support for H.239 allows users to share documents or presentations, even if they're sent by a remote site, on a single monitor. Additionally, users can participate in high-bitrate videoconferences, while streaming those conferences over the Internet at a lower and more appropriate bandwidth. Administrators can configure and start streaming via the HD600 web-based remote management program.

### Integration APIs

The HD600 serial and IP-based APIs allow for easy integration of video with a variety of products. Using the APIs, developers can equip their tailor-made applications with the following features:

- |                       |                            |
|-----------------------|----------------------------|
| Call initiation       | Set network QoS parameters |
| Call termination      | System reboot              |
| Set call parameters   | Multicast settings         |
| Set system parameters | Debugging messages         |
| Streaming control     |                            |

## High Quality Videoconferencing Codec



**Emblaze-VCON Ltd.**  
**Headquarters**  
 Beit Rakefet  
 1 Emblaze Square  
 POB 2220  
 Ra'anana 43662  
 Israel  
 Tel: +972-9-7627800  
 Fax: +972-9-7627801

**Emblaze-VCON, Inc.,**  
**Americas**  
 2 University Plaza, Suite 201  
 Hackensack, NJ 07601  
 USA  
 Tel: +1-201-883-1220  
 Fax: +1-201-883-1229

**Emblaze-VCON China**  
**Representative Office**  
 Unit 1321, Tower B, COFCO Plaza  
 No. 8 Jianguomennei Avenue  
 Beijing, 10005  
 China  
 Tel: +86-10-6526-9791  
 Fax: +86-10-6526-9790

**Emblaze-VCON GmbH**  
**Germany**  
 Schmellerstr. 23  
 D-80337 Munchen  
 Germany  
 Tel: +49-89-76757142  
 Fax: +49-89-76757143

**Emblaze-VCON Italy**  
 Via Portuense 1555  
 Commercio M27  
 00050 Ponte Galeria (Rome)  
 Italy  
 Tel: +39-06-400-43110  
 Fax: +39-06-400-43113

**Emblaze-VCON UK**  
 London House, 42 Brook St.  
 London, W1K 5DB  
 United Kingdom  
 Tel: +44 (0)117 302 6795  
 Fax: +44 (0)117 302 6794

### Video Specifications

#### Transmission Speed

H.323: 64 Kbps - 2 Mbps

#### Video Standards

H.261, H.263, H.263+/++

#### Live Video Resolution

CIF (352 x 288 pixels)  
 SIF (352 x 240 pixels)  
 QCIF (176 x 144 pixels)

#### Video Frame Rate

Up to 15 fps: 64 - 320 Kbps  
 Up to 30 fps: 384 Kbps +

#### Video Inputs

2 Composite, RCA/Phono ports

#### Video Outputs

S-video, 4 pin mini DIN  
 Composite, RCA/Phono  
 VGA, Dtype 15

#### Cameras Supported

Pan/Tilt (PT) Analog  
 Sony D100  
 Sony EVI-D30/31  
 Stationary Analog

#### Far-end Camera Control (FECC)

Complies with H.281 Annex Q

#### Data Specifications

##### Data Ports

RS-232 control port (for Serial API or PTZ camera control)

##### Data Sharing

Complies with H.239 ITU-T standard  
 Utilizes HD Data utility for sharing PC desktop applications and presentations.

##### Data Video Resolution

SVGA (800x600)  
 VGA (640x480)  
 up to 4CIF for PAL/NTSC monitors

#### Security Specifications

##### Encryption

Complies with H.235 (AES) ITU-T standard

#### Audio Specifications

##### Audio Standards

G.711, G.722, G.723.1, G.728, G.729

##### Audio Inputs

Microphone omni (mini stereo)  
 Built-in microphone on stationary camera  
 Line level RCA, L/R

##### Audio Outputs

Line level RCA, L/R

##### Audio Features

Full duplex echo cancellation  
 Automatic noise suppression  
 Ability to turn off internal echo canceller  
 DTMF tone generation

#### Networking Specifications

##### Standards Supported

ITU-T: H.323 v4

##### Networking

Integrated 10/100 Ethernet NIC  
 DHCP  
 WINS  
 DNS  
 FTP  
 HTTP with DAA  
 Telnet

##### Software Upgrades

Via HD Upgrade utility, the HD600 device, or Emblaze-VCON's Media Xchange Manager® (MXM)  
 Upgrade availability notification

##### Phone Book Capacity

1000+ entries  
 Multi-language support  
 Unicode support

##### H.323 QoS Features

DiffServ  
 IP Precedence  
 Firewall port sync  
 NAT IP address mask  
 Port pinholing  
 Adaptive Bandwidth Adjustment  
 Packet ordering  
 Packet duplication control  
 Jitter correction  
 Lip sync correction  
 Overhead prediction

#### Streaming Specifications

##### HD Simulcast™

Multicast Streaming Video  
 Multicast to Emblaze-VCON's Broadcast Viewer, Quicktime viewer and other multicast viewers with integrated SDP listeners

##### Unicast Streaming Video

Unicast to Quicktime viewers  
 Data rate downsampling  
 Multicast-unicast in same call:  
 Up to 15 unicast streams at 384Kbps during multicast session  
 Up to 10 unicast streams at 384Kbps during 384Kbps call + multicast

##### Interactive Multicast

Participate in any Emblaze-VCON Interactive Multicast session  
 Uses bandwidth-efficient IP multicast

#### Other Specifications

##### Browser-based Management

Uses DAA (Digest Access Authentication)  
 Dial/Hangup calls  
 Phone book management  
 Device and network configuration  
 Streaming start/stop/view  
 Camera and volume control  
 Call status  
 Diagnostics  
 Call detail reports

##### Control

Hand-held Remote control  
 Internal infrared receiver

##### Physical Dimensions

Height/Length/Width:  
 4.2 cm x 25 cm x 19 cm  
 (1.65 in x 9.84 in x 7.48 in)  
 Weight: 1.050 kg (2.3 lb)

##### Language Support

English, French, Italian, Spanish (Spain and Latin), Portuguese (Portugal and Brazil), German, Chinese (Simplified and Traditional), Japanese, Russian, Swedish, Finnish, Turkish, Korean