



High-Quality Set-top Videoconferencing System



The HD3000 is Emblaze-VCON's most advanced set-top conferencing system, combining videoconferencing, streaming video, and multipoint conferencing all in one. The high-quality, lifelike video and crisp, clear audio guarantee that meeting participants are experiencing the best videoconferencing quality available. The HD3000 streaming capabilities extend the reach of any point-to-point or multipoint videoconference out over the network, where it can be viewed by any authorized person with a streaming viewer. The HD3000's built-in MCU allows for multiparty videoconferences without any additional cost, and provides the best value of any set-top conferencing appliance in the market today.

Advantages of Conferencing with HD3000

- Provides TV-like video quality using the H.264 video standard
- Multipoint conferencing capabilities via an embedded 4-port MCU
- HDSimulcast™ technology for advanced streaming capabilities
- H.239 and HD DualStream™ for simultaneously sending video and data streams
- Movable Picture in Picture (PIP)
- Dual monitor support
- Web-based management for easier control and administration
- Media Xchange Manager® management for advanced videoconferencing functions
- Supports encrypted conferences using the H.235 encryption standard (AES)
- Multiple languages

Embedded MCU*

The HD3000's embedded MCU can connect up to 4 sites. Participants can dial into a multipoint videoconference, or the MCU administrator can set up a dial-out conference, instantly connecting all parties. With chair control, the conference administrator can ensure the conference runs smoothly. Using Emblaze-VCON's HD DualStream technology, participants can share data and video simultaneously during a multipoint conference, as well as view data and video sent by a remote site on a single monitor.

Advanced Streaming Capabilities

The HD3000 incorporates multiple ways of streaming live videoconferences both over the corporate network and over the Internet, during a point-to-point or multipoint conference. Additionally, users can participate in high-bandwidth videoconferences, while streaming those conferences over the Internet at a lower and more appropriate bandwidth. Users can simultaneously stream a presentation and live video to the remote site. These streaming capabilities can be accessed via the HD web manager, allowing the network administrator to begin and end streaming, while the conference leader can concentrate on the meetings' proceedings.



Emblaze-VCON's HD3000 incorporates high-quality videoconferencing, multipoint conferencing, and streaming into a low-cost, user-friendly set-top appliance.



High-Quality Set-top Videoconferencing System

What's in the box?



- g HD3000 set-top unit
- g Power cable
- g Audio and Video cables
- g LAN cable
- g RS-232 serial cable
- g Handheld remote control
- g Tabletop microphone (omni)
- g Universal power supply
- g User's guide

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Video Specifications

Transmission Speed

64 Kbps - 4Mbps

Video Standards

H.261, H.263, H.263+/+, H.264

Video Inputs

Integrated main camera
 S-video (2nd camera)
 Composite/RCA/Phono (2nd camera)
 Composite/RCA/Phono (DVD/VCR)

Video Outputs (NTSC or PAL)

S-video (main monitor)
 Composite/RCA/Phono
 (2nd monitor/VCR/DVD)
 XGA, D-type 15 (main/2nd monitor)

Video Formats & Resolution

Interlaced CIF (352 x 576 pixels)
 Interlaced SIF (352 x 480 pixels)
 CIF (352 x 288 pixels)
 SIF (352 x 240 pixels)
 QCIF (176 x 144 pixels)
 4CIF (H.263) (704 x 576 pixels)*

Video Frame Rate

Up to 15 frames/sec: 64Kbps to 384Kbps
 Up to 30 frames/sec: 384Kbps and higher
 Up to 60 fields/sec: 1 Mbps and higher

Integrated Main Camera

Pan/Tilt/Zoom (PTZ)
 Pan range: +/- 100° (left/right)
 Tilt range: +90/-30°
 Zoom range: 16x
 Focal length: 4.0 - 64 mm
 Auto focus, full auto white balance
 9 local and 9 remote preset positions

Audio Specifications

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

Audio Inputs

Microphone omni (mini stereo)
 Line-level RCA, L/R (VCR)
 Line-level RCA for Aux mono input

Audio Outputs

Line-level RCA, L/R (TV)
 Line-level RCA, L/R (VCR recording)

Audio Features

Full duplex echo cancellation
 Automatic noise suppression (ANS)
 Gain control
 Microphone and VCR input audio mixing
 Ability to turn off internal echo canceller
 DTMF tone generation

Data Specifications

Data Sharing

Utilizes desktop/laptop presentations utility

Data Ports

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

Data Video Resolution

XGA (1024 x 768)
 SVGA (800 x 600)
 VGA (640 x 480)
 up to 4CIF for PAL/NTSC monitors

HD DualStream™

H.239 support
 1 live video source + 1 data source
 Supported in MCU mode
 Supported for both video and data streaming

Streaming Specifications

HD Simulcast™
 Multicast Streaming Video
 Multicast to Broadcast Viewer, Quicktime, and other multicast viewers with integrated SDP listeners

Unicast Streaming Video

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

Emblaze-VCON Interactive Multicast

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

Networking Specifications

Standards Supported

ITU-T: H.323 v4
 Annex Q (FECC)

Networking

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

Software Upgrades

Via LAN
 Notification of upgrade availability

Directory Services

1000+ local number directory

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

Embedded MCU Specifications

4 participants @ 384 Kbps/part.
 3 participants @ 768 Kbps/part.
 Voice-activated switching
 Speed matching
 Dial-in or dial-out
 Cascading up to 10 sites
 H.243 chair control

Other Specifications

Security
 Encryption using H.235 (AES)
 MTU- allows to set the MTU packet size to match the need of the network.
 (Default setting is 1200 bytes)

Browser-based Management

DAA (Digest Access Authentication)
 Dial/Hang-up
 Start/stop streaming
 Phone Book management
 IP address
 Gatekeeper registration
 LAN configuration
 Call status
 View streaming
 Camera control
 Diagnostics

Control

Handheld remote control
 Embedded web-based control
 IP-based API

Physical Dimensions

34 cm x 21 cm x 13 cm
 (13.4 in x 8.3 in x 5.1 in)
 2.3 kg (5 lb)

Language Support

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

* Receiving only

