

> C-SUITE RECORD | STREAM | REVIEW

EDUCATIONAL TOOLSET



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CLEARLY SUPERIOR



› SECURE, SIMPLE, HD VIDEO OVER IP

► CLARITY:

- > High Definition (HD) Video in 1080p60
- > Real-Time Clinical Training in HD
- > On-Demand Record, Review and Publishing Capabilities

► CONFIDENCE:

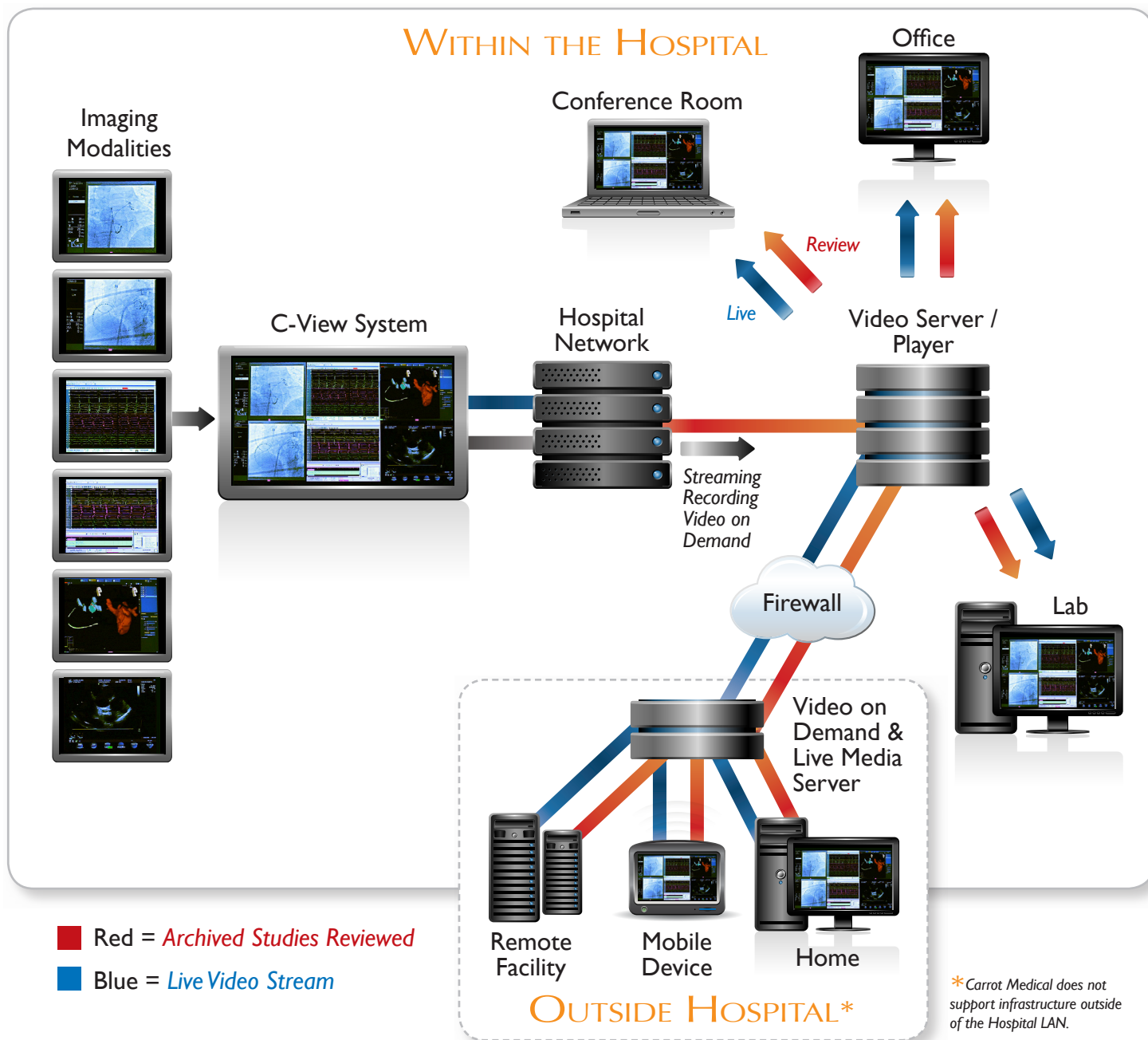
- > Only Secure End-to-End Solution (HIPAA)
- > Encrypted H.264 Video Streams
- > Restricted Access via Conditional Access Option

► CONTROL:

- > No IT Upgrade Required
- > No Player Installation Required
- > No End-User Licenses Required



C-SUITE: THE ECOSYSTEM



TECHNICAL SPECIFICATIONS

Encoder (x-290E-DVI):

Video (Inputs):

- Y, Pb, Pr / RGBHV component analog
- Y, Cb, Cr / DVI component digital

Video Resolutions:

- 1920x1080p 60/59.94/50/30/29.97/25 Hz
- 1920x1080i 60/59.94/50 Hz
- 1280x720p 60/59.94/50/30/29.97/25 Hz
- 720x480/576i 60/59.94/50 Hz
- 720x480/576p 60/59.54/50 Hz
- (Interlaced Shown in Fields per Second)

Computer Resolutions:

- 1920x1080 60 Hz
- 1280x1024 75/60 Hz
- 1280x768 85/75/60 Hz
- 1024x768 85/75/60 Hz

Audio (Input):

- Available through Terminal Block Connector:
- Balanced Stereo Analog Audio
- Unbalanced Stereo Analog Audio

Advanced Features:

Video (Inputs):

- Hi Lo Streaming
- SD De-Interlacing
- Built-In Downscaling
- De-blocking Filter
- Forward Error Correction
- AES Encryption
- Logo Overlay
- Still Image Transmission
- SD Aspect Ratio Configuration
- Color Space Configuration

Features:

- Nothing to Install or Update on Desktops
- Lightweight, Highly Optimized for Efficiency
- Full Television-like Experience
- Launch in User or Administrator Defined Configurations
- Supports Live, Playback, or VoD Streams
- Built-in De-Interlacing
- Up to 256 bit AES Decryption
- Forward Error Correction
- SAP (Secondary Audio Program)
- User Authentication through VF Conditional Access
- Launched from any Web Page
- Configurable Decoding Latency
- "Always on Top" and Frameless Modes
- Supports one or all Spaces VoD with full "Trick-Mode"
 - (Play, Pause, FF, REV, and Full Frame Accurate Forward/Backward Slow Motion)
- HotMarks™ Metadata within VoD
- Time and Frame Count for VoD Playback
- Saves User Preferences

Video Encoding:

Compression Standard:

- H.264 (MPEG-4 AVC Part 10)
- ISO/IEC 14496-10
- Main Profile
- Level 4.2 and Lower Intermediate Levels
- I, IP Framing
- Configurable Group of Picture (GOP) Size
- Configurable Frame Rate

Bit Rates:

- SD/HD from 150 kbps to 15 Mbps

Rate Control:

- Traffic Shaping

Latency (Encode Only)

- Less than 70ms

Audio Encoding:

Compression Standard:

- MPEG-2 AAC-LC ISO/IEC 13818-7
- MPEG-4 AAC-LC ISO/IEC 14496-3

Audio Channels:

- 2 Per Video Channel

Bit Rates:

- From 32 to 448 kbps per Audio Pair

Frequency Response:

- From 20 Hz to 22kHz

Minimum System Requirements:

- | | |
|-------------|---|
| - SD MPEG-2 | Intel Pentium III 500 MHz or PowerPC G3 700 MHz |
| - SD H.264 | Pentium D 2.8 GHz |
| - HD H.264 | Intel Core 2 Quad 2.66 GHz |

Supported Platforms:

- Windows XP/Vista, 7
- Mac OS/X
- Linux
- Sun Solaris 10
- Stingray Set Top Box

IP Network Interfaces:

Standard:

- Ethernet 10/100/1000 Base-T
- Auto-Detect, Half/Full-Duplex

Connector:

- RJ45

Networking Protocols:

- Unicast Streaming
- Multicast Streaming (IGMP v3)
- Multiple Unicast Streaming
- MPEG Transport Stream over UDP/RTP
- Direct RTP-H.264 over RTP (RFC 3984)
- RTP/RTCP (RFC 3550)
- QuickTime RTSP* (RFC 3640)
- SAP (RFC 2974)

* Progressive Resolutions Only

Frequency Response:

- From 20 Hz to 22kHz

Management Interfaces:

Standard:

- RS-232 (Optional)
- RJ45 to RS-232 (DB-9 Management Cable Req'd)

Management:

- HTTP (Web Browser)
- Command Line over Telnet/RS-232
- FTP/TFTP
- Furnace Portal Server

Video Compression:

- MPEG-1 ISO/IEC 11172
- MPEG-2 ISO/IEC 13818-2
 - Main Profile @ Main Level
 - I, P, B Frame Support
- MPEG-4 Part 2 ISO/IEC 14496-2
 - Simple Profile
- MPEG-4 Part 10 AVC / H.264 ISO/IEC 14496-10
 - Main Profile @ Level 4.2
 - I, P, B Frame Support
 - Frame and Field Mode Support

Video Resolution:

- Video Resolutions: CIF to 1080p60 (1920x1080)
- Computer Resolutions: 640x480 to 1280x1024

Audio Compression:

- MPEG-1 Part 3 Layer II ISO/IEC 11172-3
- MPEG-1 Part 3 Layer III ISO/IEC 11172-3 (MP3 Audio)
- MPEG-2 Part 7 AAC-LC ISO/IEC 13818-7
- MPEG-4 Part 3 AAC-LC ISO/IEC 14496-3

Networking:

- MPEG Transport Stream over UDP
- Unicast and Multicast Support

Typical Storage Usage:

- (10) minutes of Hi Quality = ~450 MB
- (10) Minutes of Lo Quality = ~150 MB

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