



# EZ TV

## Enterprise IPTV and Digital Signage Platform



EZ TV is a Technology & Engineering Emmy award-winning, all-in-one integrated platform that combines broadcast-quality IPTV distribution with powerful digital signage capabilities.

### EZ TV Platform Server

- Up to 5,000 concurrent IPTV Mobile Device Players, Player Lite Players, IPTV Set-top boxes or Digital Signage end-points for TVs from a single server instance
- Digital Rights Management (DRM) - management of AES 128/256-bit keys based on user access rules
- Clustering capability to support HQ server with multiple edge servers serving remote users
- TAA- and NDAA-compliant. Embedded OS patched and secured to meet highest cyber-security and information assurance standards
- Real-time end-point HDMI output snapshot, providing operators with visual confirmation of what each end-point sends out to the display
- Display multiple live feeds

### Footprint

- EZ TV Platform is offered on a 1-RU physical server and as a software package that is installed on any third-party machine, or as a virtual machine

### Physical server specifications (EDU, Basic, Explorer):

- HP DL20/DL20+, Quad-Core 3.0GHz CPU (1-RU)
- 32GB RAM
- 2 x 1Gbps network interfaces
- 2 x Power supplies 500W AC 110/240V 50/60 Hz
- Windows 2022 Server 64-bit
- Dimensions: 1.70" (4.32cm) Height x 17.11" (43.46cm) Width x 15.05" (38.22cm) Depth
- Weight: 17.37lb (7.88kg)

### Features & Benefits

- Easy-to-deploy and manage solution for distribution of IPTV channels over LAN, WAN and Wi-Fi to any viewing device
- Browser-based solution supports up to 5,000 concurrent viewers from one server - no licences, no recurring costs
- Supports live, recorded and on-demand content, including media archiving and collaboration (EZ TV Media Library)
- Ability to extend the solution to Video Walls, mobile devices and LG WebOS TVs
- Includes SignSync™, an innovative method of synchronising content within signage playlists, across any number of end-points, and still allowing updates in real-time
- Platform can run as an on-premise instance or be deployed as a Cloud Platform (private instance managed by the customer)
- Ability to design engaging signage with a combination of videos, images, image playlists, RSS, text, 3D shapes etc

### Minimum requirements for installation on third-party servers, cloud-hosted instances or as a virtual machine (Basic, Explorer):

- 1 x Quad Core 3.0GHz CPU
- 32GB RAM
- 2 x 1Gbps network interfaces
- 1TB Disk Space (OS only)
- Windows Server 64-bit 2019/2022 with IIS and all OS service packs installed

### Physical server specifications (Pro, Enterprise):

- HP DL360, 2x Octa-Core 2.4GHz CPUs (1-RU)
- 32GB RAM
- 4 x 1Gbps network interfaces
- 2 x Power supplies 500W AC 100/240V 50/60 Hz
- Windows 2022 Server 64-bit
- Dimensions: 1.70" (4.32cm) Height x 17.11" (43.46cm) Width x 27.5" (69.85cm) Depth
- Weight 33.3 lb. (15.31 kg)

### Minimum requirements for installation on third-party servers, cloud-hosted instances or as a virtual machine (Pro, Enterprise):

- 2 x Octa-Core 2.4GHz CPUs
- 32GB RAM
- 1 x 1Gbps network interface
- 1TB Disk Space (OS only)
- Windows Server 64-bit 2019/2022 with IIS and all OS service packs installed

### Advanced capabilities

- Automatic data replication between EZ TV Servers - High Availability redundant configuration
- Integration with Microsoft Domain Controllers for users and content access management
- Integration with Gracenote's (Tribune™) electronic programming data syncs up-to-date information for all major satellite, cable and local channels
- Automatic discovery of available IPTV streams on the network using Session Announcement Protocol (SAP)
- Centralised web-based interface for content management, scheduling Events and Signage Campaigns and control of TV displays
- Unlimited number of unique Digital Signage layouts and scheduled events (macros)
- Certificates of Net Worthiness, DIACAP, documentation for use on classified networks provided upon request

### EZ TV VOD / NDVR / Media Library / Render Server

- Supports streaming to desktops, laptops, TVs and mobile devices
- Supports recording and streaming of AES-256/128-bit encrypted streams
- Streaming / Recording capacity - 400Mbps input + 400Mbps Output
- Built-in storage 2TB (Raid-5) + support for network attached storage (NAS)
- TAA and NDAA Compliant. Embedded OS patched and secured to meet highest cyber-security and information assurance standards

### Footprint

- EZ TV VOD / NDVR / Media Library / Render is offered on a 1-RU physical server or as a virtual machine

### Physical server specifications:

- HP DL360, 2x Octa-Core 2.4GHz CPUs (1-RU)
- 32GB RAM
- 4 x 1Gbps network interfaces + 2 x 10Gbps fibre network interfaces
- 2 x Power supplies 500W AC 100/240V 50/60 Hz
- 2TB built-in video storage RAID 5 configuration
- Red Hat Enterprise Linux Server release 8
- Dimensions: 1.70" (4.32cm) Height x 17.11" (43.46cm) Width x 27.5" (69.85cm) Depth
- Weight 33.3 lb. (15.31 kg)

### Minimum requirements for installation on cloud-hosted instances or as a virtual machine:

- 2 x Octa-Core 2.4GHz CPUs
- 32GB RAM
- 1 x 1Gbps network interfaces (1 x 10Gbps network interfaces if recording more than 20 IPTV streams)
- 200GB Disk Space (OS only)
- External NAS/SAN storage for video content

### Video formats

- Video: MPEG-1, MPEG-2, MPEG-4 part 2, MPEG-4 part 10 H.264, HEVC H.265 - ITUT H.265 / ISO IEC 23008-2
- Audio: MPEG 2 AAC-LC, MPEG 2 AAC-HE, MPEG 4 AAC-LC, MPEG 4 AAC-HE, AC-3, MPEG-1 Layer 2 (ISO/IEC 11172-3)

### EZ TV Player Lite for Desktops/Laptops

- True multicast delivery of live and recorded video streams, all the way to enterprise users' computers, without going through multi-unicast distribution servers
- Scale live video distribution to desktops and laptops cost-effectively
- GPU acceleration support for higher efficiency decoding of MPEG video with less impact on desktop/laptop CPU
- Best-in-class 300 milliseconds of decoding latency for HD streams
- SRT with support for delivery of IPTV streams to remote users / employees working from home
- Real-time AES decryption support
- No recurring seat license fees

### Operating systems:

- Microsoft Windows 10, 11
- MacOS 12

### Internet browsers:

- Google Chrome
- Apple Safari
- Mozilla Firefox
- Microsoft Edge

### Multiview Playback for IPTV Streams:

- Up to 4x SD/HD channels on single screen

### Supported streaming protocols:

- UDP, RTP/RTSP, MPEG-2 Transport Stream, HTTP progressive download, HLS, Multicast / Unicast, VITEC TurboVideo™, SRT, MPEG-Dash

### Supported video formats:

- MPEG-1, MPEG-2, MPEG-4 part 2, MPEG-4 part 10 H.264, HEVC (High Efficiency Video Coding) H.265 - ITUT H.265 / ISO IEC 23008-2, WMV, Quick Time, HTTP live streaming HLS
- All resolutions from QCIF up to 4K

### Supported audio formats:

- MPEG 2 AAC-LC, MPEG 2 AAC-HE, MPEG 4 AAC-LC, MPEG 4 AAC-HE, AC-3, MPEG-1 Layer 2 (ISO/IEC 11172-3)

### EZ TV Browser Player for Desktops/Laptops

- The Browser Player has the same features and specifications as EZ TV Player Lite with the differences listed in this section.

### Internet browsers:

- Microsoft Edge

### Multiview Playback for IPTV Streams:

- Up to 25x SD/HD channels on single screen

### Metadata:

- Line 21: SCTE-20/21 Closed captioning, CEA-608/708 (user-configurable enable / disable + captions position)
- DVB subtitles (ESTI EN 300 743) supported on IPTV end-points and SoC TVs
- MISB KLV/STANAG input over UDP
- NGA Motion Imagery Standard Profile (MISP) Compliant; EG 0104.5, EG 0601.6, MISB STD 0604.2, MISB EG 0904, MISB STD 0601.6, STANAG 4609 (Edition 3), SMPTE 336M/335M

### Advanced capabilities:

- On-screen text overlay and real-time parsing and display of KLV / STANAG metadata
- Security classification tagging - real-time colour coding of displayed video based on classification
- Auto-detection and enumeration of multiple audio tracks

### IPTV / Digital Signage End-Point Specifications

- Rugged, fan-less and 100% silent compact appliance with IR, IP and SDK control system options
- Discrete hardware processors for video decoding and signage graphics layout
- AES decryption and Active Directory support fully integrated with VITEC's IPTV encoders
- VESA-compatible integrated mounting brackets and RS-232 serial interface for TV control (H-series only)
- Dual video decoding of IPTV streams or files simultaneously / Picture-in-Picture
- Sub 500ms glass-to-glass decoding of live IPTV streams ideal for real-time events such as sports, news, situational awareness video
- TAA- and NDAA-compliant. Embedded OS patched and secured to meet to highest cyber-security and information assurance standards
- Powerful visual effects capabilities including alpha channel layering of images over video, dynamic text over graphics and video and real-time content updates without interruption to signage scheduling and playback
- SRT - Enhanced security support for SRT streams with the ability to play streams with SRT security and MPEG-TS AES security.

### HP DL20/DL20+

- Dimensions: 1.70" (4.32cm) Height x 17.11" (43.46cm) width x 15.05" (38.22cm) Depth

### HP DL360

- Dimensions: 1.70" (4.32cm) Height x 17.11" (43.46cm) Width x 27.5" (69.85cm) Depth

### Notes:

For more information about the specific capabilities and supported IT environment for the browser players refer to the EZ TV Platform user manual or contact VITEC.

For IPTV / Digital Signage end-points and Video Wall Processors information and technical specifications, please refer to VITEC's End-Points and Video Wall Processors brochures.

EZ TV Player Lite is powered by VITEC's Multicast-to-the-Edge™ technology US Patent No. 10728589