



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

- The EZ TV Platform is offered as a:
 - 1-RU physical server
 - software package (installed on any third-party machine)
 - virtual machine

Physical server specifications (Basic, EDU, Explorer, Pro, Enterprise) - 19652/19653/19654/19655/19656:

- VITEC 1-RU server appliance
- 32GB RAM
- 2x 2.5GbE network interfaces
- Redundant power supply (2x Power supplies 400W AC 110/240V 50/60 Hz)
- 1TB storage
- Windows Server
- Dimensions: Height 43mm (1.7") x Width 483mm (19") x Depth 540mm (21.3")
- Weight: 9.5kg (20.94lb)

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 licenses, 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 EZ TV Platform installation on third-party servers, cloud-hosted instances or as a virtual machine - 15482/15483/15484/18410:

- 8 Core 3.0GHz CPU S (Basic, Explorer)
- 16 Core 2.4GHz CPU S (Pro, Enterprise)
- 32GB RAM
- 2x 1Gbps network interfaces
- 1TB storage (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-ML/Media Library Renderer 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-ML/Media Library Rendering Server is offered on a 1-RU physical server or as a virtual machine

Physical server specifications (EZ TV VOD) – 19646:

- 2x Xeon 2.4GHz CPUs (1-RU)
- 32GB RAM
- 2x 10Gbps network interfaces + 2x 10Gbps fiber network interfaces
- 2x Power supplies 400W AC 100/240V 50/60 Hz
- 2TB built-in video storage RAID 5 configuration
- Red Hat Enterprise Linux Server release 8
- Dimensions: Height 43mm (1.7") x Width 435mm (17.11") x Depth 650mm (25.6")
- Weight 13.25kg (29.2lb)

Physical server specifications (EZ TV VOD-ML/Media Library Rendering Server) – 19647/19648:

- 2x Xeon 2.4GHz CPUs (1-RU)
- 64GB RAM
- 2x 10Gbps network interfaces + 2x 10Gbps fiber network interfaces
- 2x Power supplies 1000W AC 100/240V 50/60 Hz
- 2TB built-in video storage RAID 5 configuration
- Red Hat Enterprise Linux Server release 8
- Dimensions: Height 43mm (1.7") x Width 483mm (19") x Depth 780mm (30.7")
- Weight 16.9kg (37.2lb)

Minimum requirements for VOD-ML/Media Library Rendering Server installation on cloud-hosted instances or as a virtual machine – 17566/16853/18259/17447/17455:

- 16 Core 2.4GHz CPUs
- 32GB RAM
- 1x 1Gbps network interfaces (1x 10Gbps network interfaces if recording more than 20 IPTV streams)
- 200GB storage (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 a 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)

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

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 a single screen

IPTV/Digital Signage End-Point Specifications

- Rugged, fanless 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 cybersecurity 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.

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