

**Video Furnace System 5**  
End-to-End Solution for Video-over-IP  
featuring the remarkable “Zero Footprint”  
InStream™ Player

*HaiVision’s Video Furnace System 5 provides a secure, easy to use, simple to deploy, end-to-end system for encoding and distributing live video to computers and set top boxes, for creating scheduled playback channels for enterprise TV and signage, and for recording content and delivering video on demand.*

**More uses, more users!!** Video Furnace is a complete IP video solution. The viewing experience to access live and recorded channels as well as on demand content is provided for the desktop through the “zero footprint” InStream™ player and to fixed monitors and displays through the STINGRAY™ set top box. With fine grain control of all viewers and displays, Video Furnace is the ideal system for managing and distributing enterprise video securely, for establishing HD signage throughout a facility, for providing on demand material, and for capturing, organizing, and reviewing events.



**Contribute**



**Manage**



**Distribute**

**End-to-End H.264** Video Furnace provides seamless end-to-end capabilities. The Furnace Portal Server controls the direct and secure distribution of SD and HD H.264 video and MPEG-1, MPEG-2, MPEG-4 SD video to both the InStream™ player and the STINGRAY set top box. The Furnace Playback Manager supports scheduled channels for both live and prerecorded IP video broadcasts and digital signage. The Furnace Media Server enables video-on-demand. Leveraging the efficiencies of H.264 video compression, high definition media is available to all users. Furthermore, the Furnace system is designed to operate seamlessly with HaiVision’s revolutionary BARRACUDA™ and MAKITO™ H.264 encoders, delivering live SD and HD content at bit rates from 150 kbps to 15 Mbps.

**PLAYER/STB SYNCHRONIZATION**

Having 100% control of the InStream™ player and the STINGRAY STB’s enables a unique benefit - the ability to synchronize desktop players with set top boxes. One application example is delivering video to a financial trading floor. While listening to private audio of their favorite broadcast using InStream™ on their desktop, traders can look up and view the associated video on centrally located flat panels with perfect audio/video synchronization .



**HILO STREAMING**

Many aspects of HaiVision’s encoding technologies (such as the MAKO, MAKITO and BARRACUDA) are perfectly suited to the Video Furnace IP video distribution system. The HiLo Streaming feature is a perfect example. Encoders with HiLo can simultaneously emit full bandwidth high resolution streams and low bandwidth “reduced resolution” streams. This allows Video Furnace to provide users with the flexibility to choose the streams best suited to their network or system capabilities without any transcoding costs or delays.



The “Zero Footprint” InStream™ Player Unique to the Furnace system is the InStream™ player technology. InStream™ is the industry’s only client/server based, fully MPEG compliant, desktop and set top box viewing technology. InStream™ is not browser based, but can be accessed through any browser. InStream™ is platform independent allowing it to run on Windows, Mac, Linux, or Sun Solaris 10 systems. When a user requests to view video, the Furnace Portal Manager sends the compact, highly optimized InStream™ player to the user’s computer providing a feature rich video viewing environment. When the user closes InStream™, it is removed from the client computer without a trace. With InStream™, there is never anything to install or maintain on the client computers all without any plug-ins or ActiveX controls. This eliminates need for the IT group to harmonize user computers in any way – nothing to install and nothing to maintain. Because InStream™ is incredibly easy to use, does not require installation, works on any platform, and has unlimited and controlled player distribution, managers can rest assured that they will have broad scale user adoption of all their media efforts.



**Capture, Create, Schedule** Video Furnace provides administrators with powerful tools for the recording and editing of content. The recording tools include a scheduled network video recorder (NVR), the ability to record live “on the fly”, and the option to continually archive past programming so you never miss an event. To organize media assets, Video Furnace includes powerful editing, bookmarking, and library metadata tools. The Furnace system also includes advanced administrative tools for programming playback channels, either live broadcasts from portable encoders or playback of content from disk. With Furnace’s comprehensive interface, scheduling of content can be set up to 30 years in advance. For live television, up to two weeks of electronic programming data can be captured and made available at all times.

**Conditional Access** Many organizations employ various techniques for user access control. Some basic methods including web access page control and network based restrictions. The most secure access method, regardless of the authentication system in use, is to integrate the organization’s authentication system with the Video Furnace Conditional Access connector. By combining conditional access with Video Furnace’s powerful AES encryption, organizations can be confident that their private information remains secure and that any content arrangements for media distribution and copy protection are strictly adhered to.

**Command & Control** Unique to the Video Furnace system is the Command & Control module giving administrators full control over all InStream™ desktop players and STINGRAY set top boxes. Administrators can select the start-up state of any player or STB, adjust the operational characteristic of any player or STB on-line either on-the-fly, or according to a schedule. Administrators can also send messages to any one player or STB, or any group, or even to the entire viewing audience. Command & Control is an extremely powerful tool that can be used for anything from simple signage scheduling to user base messaging to forcing channel overrides.



**Reporting** Detailed reports of viewership are key to managing any IP video system. The combined power of Command & Control and Conditional Access allow administrators to determine the exact history of any viewer to an impressive level of detail. Practically all actions of the InStream™ player or STINGRAY STB can be reported on. Not only can administrators determine who viewed what (an essential element of HIPAA compliance in medical), but also view information on player behavior during any viewing session. For example, administrators can determine if someone muted the audio or minimized the window during an important training session. This level of reporting detail provides administrators with an unparalleled window into how video is used inside their enterprise and can help them tailor their services to have a maximum impact.

## Video Furnace Complete Server Systems

<b>S-VFBASE</b>	Furnace Base Live System 20/0/0 – InStream™ Portal Server; 20 Live, 0 Playback, 0 Mbps VOD capacity. 1U Server, 250 GB RAID.
<b>S-VFB-CH</b>	Furnace Base System with Playback 20/10/0 – InStream™ Portal Server, Playback Manager. 20 Live, 10 Playback, 0 Mbps VOD capacity. 2U Server, 2 TB RAID.
<b>S-VFB-50</b>	Furnace Base System with Playback & VOD 20/5/50 – InStream™ Portal Server, Playback Manager, Media Server (50Mbps). 20 Live, 5 Playback, 50 Mbps VOD capacity. 2U Server, 2 TB RAID.
<b>S-VFB-100</b>	Furnace Base System with Playback & VOD 20/1/100 – InStream™ Portal Server, Playback Manager, Media Server (100Mbps). 20 Live, 1 Playback, 100 Mbps VOD capacity. 2U Server, 2 TB RAID.
<b>S-VFADV</b>	Furnace Advanced Live System U/10/0 – InStream™ Portal Server. Unlimited Live, 0 Playback, 0 Mbps VOD capacity. Dual Server (1U & 2U), 250 GB RAID.
<b>S-VFADV-CH</b>	Furnace Advanced System with Playback U/10/0 – InStream™ Portal Server, Playback Manager. Unlimited Live, 10 Playback, 0 Mbps VOD capacity. Dual Server (1U & 2U), 5 TB RAID.
<b>S-VFADV-50</b>	Furnace Advanced System with Playback & VOD U/10/50 – InStream™ Portal Server, Playback Manager, Media Server (50Mbps). Unlimited Live, 10 Playback, 50 Mbps VOD capacity. Dual Server (1U & 2U), 5 TB RAID.
<b>S-VFADV-100</b>	Furnace Advanced System with Playback & VOD U/10/100 – InStream™ Portal Server, Playback Manager, Media Server (100Mbps). Unlimited Live, 10 Playback, 100 Mbps VOD capacity. Dual Server (1U & 2U), 5 TB RAID.
<b>S-VFADV-200</b>	Furnace Advanced System with Playback & VOD U/1/200 – InStream™ Portal Server, Playback Manager, Media Server (200Mbps). Unlimited Live, 1 Playback, 200 Mbps VOD capacity. Dual Server (1U & 2U), 5 TB RAID.

## Video Furnace Modules, Appliances, Accessories

<b>S-280E-SDI</b>	BARRACUDA Encoder Appliance - SD H.264 IP Video Encoder - SDI, Composite, S-Video, and Audio input; up to 480i; 64 kbps to 15 Mbps; 10/100/1000 Ethernet; 5VDC w/ 90-240 VAC External Power with Locking Connector.
<b>S-290E-HDSDI</b>	MAKITO Encoder Appliance - HD/SD H.264 IP Video Encoder - HD-SDI, SDI, Composite, S-Video, and Audio input; up to 1080p60; 64 kbps to 15 Mbps; 10/100/1000 Ethernet; 5VDC w/ 90-240 VAC External Power with Locking Connector.
<b>S-VF-STB</b>	Furnace STINGRAY Set Top Box - MPEG 1/2/4 & H.264 SD, HD, & WXGA. InStream™ Viewer and Program Guide Support. Composite, S-Video, and Component Outputs.
<b>S-VF-LF</b>	Live Furnace SD Encoder System - SD MPEG 1/2/4. Composite, S-Video, and RF Inputs. AES Encryption, FEC, and Local Archive Support. 1U Server.
<b>S-VFO-LF2</b>	Live Furnace Additional SD Encoder Option - Second SD MPEG 1/2/4 Encoding for Live Furnace System. Composite, S-Video, and RFInputs. AES Encryption, FEC, and Local Archive Support.
<b>S-VFO-LF-ARC</b>	Live Furnace SD Archive Module (per channel) - Option for up to 24 hours of Channel Caching per Live Furnace SD encoder channel. Requires either Playback Manager or Media Server.
<b>S-VFO-SLIDE</b>	Furnace SlideCaster Module - Incorporate Computer Screen (VNC, PowerPoint) with Live Furnace SD streams. InStream live, Playback, or Media Server VOD compatible. For Base and Advanced Systems.
<b>S-VF-LF-SLIDE</b>	Live Furnace SlideCaster Encoder Appliance - Secure appliance for RGB / VNC encoding to SlideCaster.
<b>S-VFO-CA</b>	Furnace Conditional Access Module - Support of User Authentication and Conditional Access through integration with LDAP, Active Directory, or RDBMS. For Advanced Systems Only.
<b>S-VF-PLF</b>	Portable SD Live Furnace -SD MPEG 1/2/4. Single encode channel. Composite, S-Video, and RF Inputs. AES Encryption and FEC. Compact Appliance System.
<b>S-VF-USS</b>	Furnace Unicast Streaming Server System - Convert live and scheduled content for unicast environments. Distribution capacity limited only by 1 Gbps NIC. 1U Server.
<b>S-VF-PSAF</b>	Portable Stand Alone Furnace System - Compact appliance, SD MPEG 1, 2, 4 Encoding, Supports Up To 100 InStream™ Clients Simultaneously