

HARDATA SMART Series

Robust and reliable integrated playout systems with multiple input and output



HARDATA SMART Series

Up to 3 channels, graphics, ingest, time-delay

The HARDATA SMART series is an easy to integrate ecosystem for automating all the functions of workflow in professional TV operations.

HARDATA SMART servers provide multiple channels that can be setup as Ingest (baseband), live input or playout in a variety of combinations.

The management of SMART servers is both simple and professional. A system of alerts and monitoring allows the administrator to anticipate problems that may arise and, with the use of a second server, can be configured in a high availability scheme.



■ FEATURE OVERVIEW



UNPACK, CONNECT, ON-AIR

Everything you need to be up and running in a flash. Easy to install, operate and maintain, it is operated through a simple, intuitive and user-friendly interface. You can be on-air in a matter of minutes!



MULTI-CHANNEL OPTIONS

A range of options to match your configuration needs and budget.



MULTI-FORMAT

Manages both SD and HD content, adapting them to the output format to ensure safe, accurate and high quality playout.



UP/DOWN CONVERSION

Real time, on-the-fly conversion of content between SD and HD. You can combine content from both formats on the same timeline. HD and SD simultaneous output.



CHARACTER GENERATION

CG allows insertion of graphics and animation – including time and temperature, external file text and metadata. A wide range of standard graphic file formats is supported.



HIGH RELIABILITY FAULT TOLERANCE

Each storage array incorporates fault-tolerant hot-swap disks with RAID 6 technology and a built-in dual hot-swap power supply.



TIME-DELAY

The TIME-DELAY can be set for each channel and has three modes:

Censorship: Delays the emission to give the operator time in case he needs to block the audio or video or the emission of a forbidden image or audio.

Time-shift: It is used to adjust the Prime Time to each location.

Broadcast-delay: It allows to play while recording. It is very useful in case you know when you need to start the recording but not when to broadcast the event, and that you may need to start airing the event while still recording, as for example sports events.



LIVE FEEDS

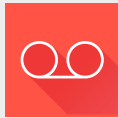
Ingest a live feed, add animated logos, graphics and text, or insert and replace advertising for error-free playout.

■ FEATURE OVERVIEW



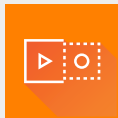
WEB ACCESS

Integrated into every HARDATA server for remote content management and reporting. Compatibility-tested on PC and Mac platforms, web access allows server imports and exports, video content preview, and broadcast report generation.



RECORDING IN SD AND FULL HD

Recording capability is available in SD and Full HD (depending on model).



PLAY WHILE RECORDING

The clip is available for playing a few seconds after you start recording and does not need to wait until it finishes recording for playback.



CONTINUOUS RECORDING

This feature records continuously. You can cut and continue recording without losing a single frame.



SUBCLIP

Subclips are sections of a video file. Each subclip has its own metadata, code and entry and exit marks. It is possible to use subclips in order to sort and edit per cut large video files.



ADVANCED CATALOGING

Marks insertion with comments and tags, which are indexed to streamline and facilitate materials search.



MULTI-LANGUAGE SUPPORT FOR ON SCREEN TEXT

Including Latin, Greek, Cyrillic, Hebrew, Arabic, Chinese, Japanese, Korean, Vietnamese and more.



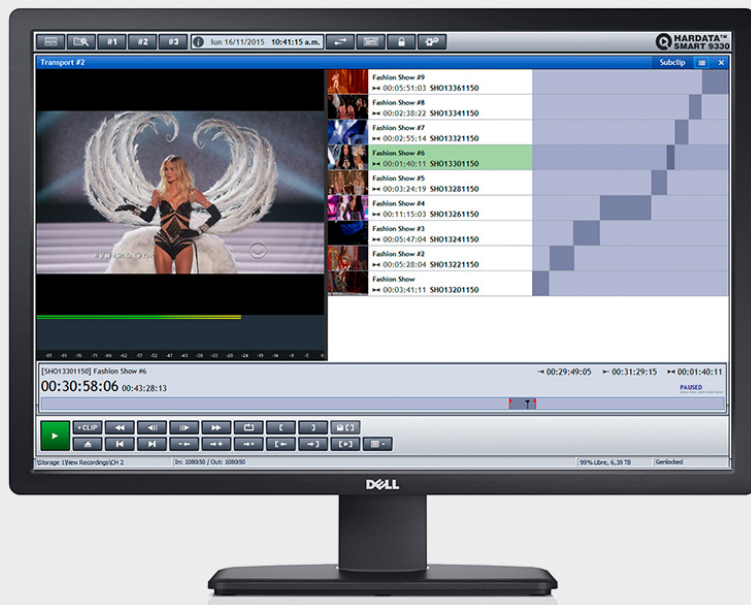
SMART FLOW DASHBOARD

A monitoring tool for the SMART FLOW Ecosystem. Control the health of your equipments, the clips synchronism between the emission server and the Smart Flow, the transference and transcode of materials between the servers of the ecosystem, all from a centralized tool.

CLIPPING

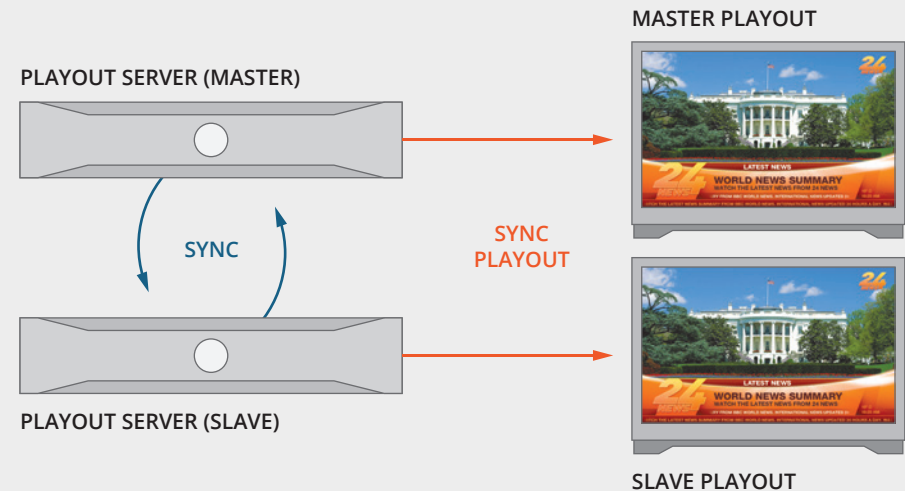
It covers the entire workflow, from the continuous recording, the material production by creating subclips with different entry and exit points, cataloguing with marks, comments and tags and immediate Broadcast. You can do all this while recording the original material.

Ideal for advertising replacing environments on deferred broadcasts, to segment movies, series and news.



HIGH AVAILABILITY OPERATION

With the use of a second playout server you can set up a MASTER/SLAVE configuration. With the SLAVE synchronized with the MASTER, all materials are copied and follow the playout list to generate a second video signal identical to the main one.



■ SPECIFICATIONS

HARDATA SMART Series	7310	7320	9330
Full HD 1080i 50/59.94/60 Hz	Yes	Yes	Yes
HD 720P 50/59.94/60 Hz	Yes	Yes	Yes
SD PAL/NSTC	Yes	Yes	Yes
FULL HD Recording	Yes	Yes	Yes
SD Recording	Yes	Yes	Yes
Video transcoding "on the fly" SD - HD, HD - SD	Yes	Yes	Yes
Live Signal Insertion	Yes	Yes	Yes
Character Generator	Yes	Yes	Yes
Time Delay	Yes	Yes	Yes
Multilanguage Support for On Screen Text,including Latin, Greek, Cyrillic, Hebrew, Arabic,Chinese, Japanese, Korean, Vietnamese	Yes	Yes	Yes
Graphics Animation	Yes	Yes	Yes
Web Access and SDK (SOAP) interface	Yes	Yes	Yes
MASTER/SLAVE Mode Ready with a second HARDATA•SMART server	Yes	Yes	Yes
Out of the box, plug in, switch on and run	Yes	Yes	Yes

CONTROLS	7310	7320	9330
Watch Folder	Yes	Yes	Yes
RS-422 Remote Control Inputs	1	2	3
VDCP Remote Control	Yes	Yes	Yes
AMP Remote Control	Yes	Yes	Yes
GPI	External	External	External
MOS Integration	Yes	Yes	Yes
HARDATA SMART FLOW	Yes	Yes	Yes
OFFICE SMART FLOW Remote Control	Yes	Yes	Yes
Emails Alarms	Yes	Yes	Yes
Twitter Integration	Yes	Yes	Yes

■ SPECIFICATIONS

PLATFORM	7310	7320	9330
Rackmount Dell Server	2 U	2 U	2 U
Hot Swap Redundant Power Supply	Yes	Yes	Yes
Hot Swap Disks Array	Yes	Yes	Yes
HDDs	8 x 600 GB	8 x 600 GB	8 x 1.2 TB
Storage Array	Raid 6	Raid 6	Raid 6
Storage	3.6 TB	3.6 TB	7.2 TB
SD Storage (H.264@3Mbps)	2600 hrs	2600 hrs	4400 hrs
HD Storage (H.264@6Mbps)	1300 hrs	1300 hrs	2200 hrs
Networking	4 x 1 GbE	4 x 1 GbE	4 x 1 GbE

TIME-DELAY	7310	7320	9330
Censorship mode	1 - 30 sec	1 - 30 sec	1 - 30 sec
Time-Shift mode	1 - 12 hrs	1 - 12 hrs	1 - 12 hrs
Broadcast-Delay mode	0 - 12 hrs	0 - 12 hrs	0 - 12 hrs

VIDEO	7310	7320	9330
Inputs / Outputs	1 Ch	2 Ch	3 Ch
Digital Video Input	SD-SDI, HD-SDI	SD-SDI, HD-SDI	SD-SDI, HD-SDI
Digital Video Output	SD-SDI, HD-SDI	SD-SDI, HD-SDI	SD-SDI, HD-SDI
Sync Input	Yes	Yes	Yes

AUDIO	7310	7320	9330
Audio Channels	16	16	16
Digital Audio Input	SDI Embedded	SDI Embedded	SDI Embedded
Digital Audio Output	SDI Embedded	SDI Embedded	SDI Embedded

■ SUPPORTED FILE FORMATS

SUPPORTED FILE FORMATS		
MXF	MPEG-PS	DV
LXF	MP4	XDCAM
GXF	MPEG-PS	
MPEG-TS	MP4	

VIDEO CODECS		
DV	MPEG-1	H.265 / HEVC
DVCPRO	MPEG-2	ProRes
DVCPRO HD	MPEG-4	DNxHD
M-JPEG	H.264 / AVC	

AUDIO CODECS		
PCM	MP3	AC-3
MP2	AAC	

RECORDING FILE FORMATS
MXF XDCAM SD (MPEG 2 @30Mbps IMX)
MXF XDCAM HD (MPEG 2 @50Mbps IMX)
MOV SD (MPEG 2 @30Mbps IMX)
MOV HD (MPEG 2 @50Mbps IMX)

■ SPECIAL REQUIREMENTS

Our core capability is software engineering, and customers frequently engage us and our authorized system integration partners to support them in the design of custom solutions.

Bring us your questions and application requirements – our solution engineers are standing by to help you.

■ CONTACT US

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