

Imagestore-Modular

Single card, 3Gbps/HD/SD master control and branding



DESCRIPTION

Imagestore-Modular is a low cost, modular master control and branding processor (3Gbps/HD/SD). It offers exceptional space and energy efficiency, with up to 10 channels in a 3RU Densité frame. Master control features include AB video/audio mixing (16 channels) plus voice-overs. Designed for pre-rendered graphics, it can provide five layers of keying (3 internal stores), character generation and EAS, as well as clock and temperature insertion.

KEY FEATURES AND BENEFITS

Modular, 3Gbps / HD / SD branding processor

- Single, card master control and branding processor
- Module is housed in Densité 3 frame, with up to 10 cards (channels) per frame
- Supports 3Gbps/HD/SD (1080p, 1080i, 720p, 576i, 480i, 59.94 Hz and 50 Hz)
- Uses widely adopted Oxtel automation protocol (Ethernet, RS-232/422)
- Manual control options include iMC panels, Branding Panel, PresStation, Vertigo Xpanel GUI, and iControl PC-based control

Multi-layer channel branding

- Four independent keying layers: three can be fed by internally stored stills/animations, and one layer fed by external graphics device (fill and key input)
- Integral storage capacity of up to 4000 images/animations
- Independent preview output
- Automated character generation for static or data-driven text rendering and crawls
- In-vision digital / analog clock insertion (with CG option)
- Emergency Alert System (EAS) support (USA only)
- Multichannel voice-overs and audio clip playback
- Temperature sensor option

Master control switching

- AB video mixing, with 16 channel audio mixing
- X-fade, V-fade and asymmetric V-fade transitions

Streamlined workflow

- Fully compatible with Vertigo branding graphics automation and asset management system for highly productive, cost-saving workflows
- Easy integration into a familiar After Effects® based workflow, using the Vertigo After Effects® plug-in

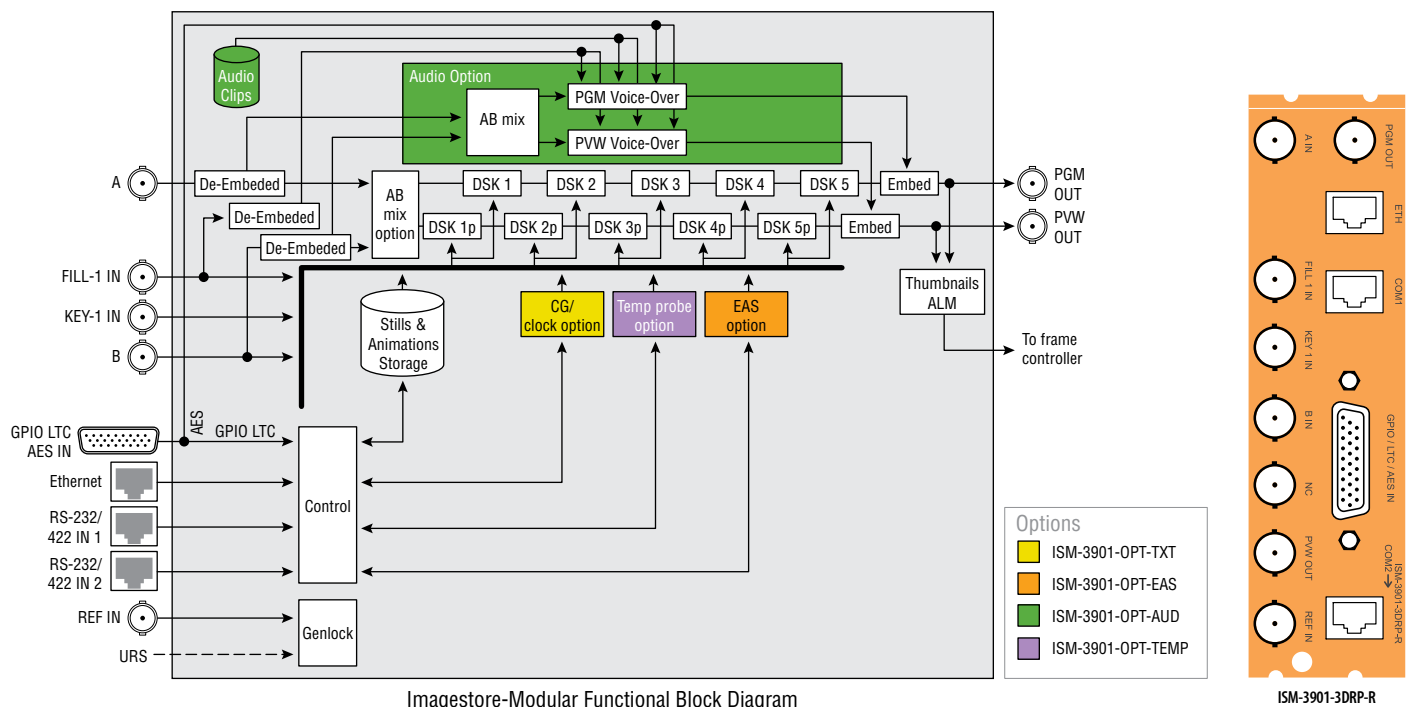
Robust design

- Compact flash memory for O/S and graphics storage
- Rugged Linux architecture
- Densité 3 frame offers redundant, hot swappable power supplies
- Mechanical bypass of program input
- Easy diagnostics via Densité 3 front panel, video thumbnails over IP, and iControl monitoring and control system

Comprehensive Densité range

- Imagestore-Modular can be easily combined with other Densité modules in the 3RU Densité frame, including signal processors, DAs, and multiviewers

MASTER CONTROL AND CHANNEL BRANDING



Imagestore-Modular Functional Block Diagram

ISM-3901-3DRP-R



Graphics applications

- Imagestore-Modular is ideal for pre-rendered animated/still graphics, such as logos and lower thirds
- The most intensive, full screen dynamic HD graphics are best performed by the top of the range Vertigo XG processor

Audio mixing and voice-overs

- Imagestore-Modular features 16 channel audio mixing, and optional 8 channel voice-over/audio clip storage and playout (simultaneous playout of two clips)
- Background audio is automatically ducked during voice-overs
- Audio is accepted as embedded audio or by four external AES inputs

Automated character generation and EAS

- The optional automated, template-based character generator can insert a crawl layer or static (dynamically updated) text layer
- High quality characters are output with 256 level anti-aliasing, with easy drop shadow and transparency control
- Unicode characters in Truetype fonts, from 6 to 600 pixels, in any RGB color
- The EAS option (USA) enables emergency text and voice-overs to be inserted automatically via GPI and RS-232, when the processor is connected to an external EAS receiver (EAS audio requires an A to D converter)

Advanced manual control

- Imagestore-Modular operates with the compact iMC panels, Branding Panel, the Vertigo Xpanel GUI, and the PresStation master control panel

TECHNICAL SPECIFICATIONS

PROGRAM AND FILL AND KEY INPUTS

Signal: 3Gbps/HD/SD-SDI SMPTE 424M, 292M, and 259M-C compliant
Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mbps

Cable length (Belden 1694A): 60 m (180 in) at 3 Gbps
120 m (360 in) at 1.5 Gbps
300 m (1000 in) at 270 Mbps

Return loss *: >15 dB up to 1.5 GHz
>10 dB from 1.5 GHz to 3 GHz

PROGRAM AND PREVIEW OUTPUTS

Signal: 3Gbps/HD/SD-SDI SMPTE 424M, 292M, and 259M-C compliant
Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mbps

Return loss *: >15 dB up to 1.5 GHz
>10 dB from 1.5 GHz to 3 GHz

Jitter (wideband): HD/SD: <0.2 UI
3 Gbps: <0.3 UI

REFERENCE INPUT

Signal: SMPTE 170M/SMPTE 318M/ITU 624-4/BUT 470-6 or comp. sync
SMPTE 274M / SMPTE 296M tri-level sync

Return loss: >35 dB up to 5.75 MHz

SERIAL CONTROL

Connector: RJ45
Signal: RS-232/422
Data rate: 9600, 19200, 38400, 57600, 76800, 115200

ELECTRICAL

Power 25 W

* Return loss figures may differ when signal is routed through the bypass relay

VIDEO PROCESSING PERFORMANCE

Signal path: 10 bits

EMBEDDED AUDIO PROCESSING PERFORMANCE

Quantization: 20-24 bits
Sampling: 48 kHz, synchronous
Number of channels: 16, 4 groups

ORDERING INFORMATION

ISM-3901	Imagestore-Modular 3Gbps/HD/SD master control switcher and logo inserter with 8 GB storage
ISM-3901-SD	Imagestore-Modular SD master control switcher and logo inserter with 8 GB storage

HOUSING FRAME

Densité 3 frame

DESCRIPTION

Housing frame with (1) PSU (AC IN), (1) Ethernet controller with front control panel, blank rear panels (up to 10 Imagestore-Modular processors per 3RU frame)

OPTIONS

ISM-3901-OPT-TXT
ISM-3901-OPT-EAS
ISM-3901-OPT-AUD
ISM-3901-OPT-TEMP
ISM-3901-HD-UPG
ISM-3901-16GB-UPG *
ISM-3901-32GB-UPG *

DESCRIPTION

Easytext Character Generator (includes analog / digital clocks)
EAS Support - USA only
Audio / voice-over / audio clip option
Temperature probe option
Upgrade from SD to HD for Imagestore-Modular-SD
16 GB upgrade for logos / animations
32 GB upgrade for logos / animations

* Check for availability