# Redwood WHITE

## Best Price-Performance Ratio Video Engine

**AVECO**

Product Data Sheet



Best Price-Performance Ratio Video Engine

Powered by CasparCG

## KEY FEATURES

**Clip playout, live inputs, multi-layer graphics insertion including DVE and many other broadcast features**

**High performance with unlimited channel branding capabilities**

**Usable as graphics engine suitable for downstream keying in studios and MCRs**

**Video processing core is powered by CasparCG open-source viable platform maintained by a large community of contributors, being proven by premium broadcasters since 2006 in 24/7 operations**

**Designed for running on COTS hardware, available for turnkey or software-only delivery**

## OVERVIEW

Aveco's Redwood WHITE video engine is designed for effective playout and integrated channel origination emphasizing the best price-performance ratio as well as studio and MCR-oriented graphics engines.

## SYSTEM DESCRIPTION

### Integrated Channel Workflow

Providing a platform for clip playout, multi-layer graphics insertion including DVE, and many other broadcast features.

Redwood WHITE is designed for running on COTS hardware. Deliverable as Aveco turnkey or as software-only with hardware locally provided. Redwood WHITE is fully integrated with Aveco's ASTRA automation products including ASTRA Studio, ASTRA MCR and ASTRA MAM, providing cost efficiency and a high performance solution.

### Best of Both Worlds

By combining the value of Aveco's robust, industry-standard automation system with the open-sourced CasparCG platform, you can take advantage of the best broadcast technologies, even with limited financial resources.

### Video Engine

CasparCG is a Windows open source software platform used to play out graphics, audio, and video to multiple outputs. It has been proven on-air by premium broadcasters since 2006 in 24/7 operations.

### Automation Platform

The ASTRA Suite of Tools can automate your facility's workflows. By automating ingest, media asset management, master control playout, and studio operations, your costs are lower and your workflows are simpler. Built around powerful media asset management, ASTRA provides tools to manage all of your content locally from your desktop or from remote locations.

# ⚙ TECHNICAL SPECIFICATION

| Category | Item | Specification |
|---|---|---|
| **Connectivity** | SDI Inputs/Outputs | SD-SDI (SMPTE-259M)/HD-SDI (SMPTE-292M)/3G-SDI (SMPTE 424M)<br>BNC, 75 Ω<br>4 bidirectional |
| | Others | Black burst reference input |
| | Network | Two 1GbE ports<br>Access: FTP, CIFS |
| **Video** | SD Output Video Definitions | 720 x 486i @ 29.97 fps<br>720 x 576i @ 25 fps |
| | HD Output Video Definitions | 1280 x 720p @ 50 & 59.94 fps<br>1920 x 1080i @ 25 & 29.97 fps<br>1920 x 1080p @ 50 & 59.94 fps |
| | Media File Wrappers | QT MOV (self-contained), MXF OP1a, AVI, MPG, MP4 |
| | Codecs | MPEG-2, MPEG-4, DV, XDCAM HD, DNxHD, ProRes |
| | Conversion | Up - configurable pillarbox, crop, anamorphic<br>Down - Configurable letterbox, crop, anamorphic<br>Cross - 720p to 1080i, 1080i to 720p |
| **Audio** | Channels | SMPTE 299M/272M<br>Up to 8 embedded per video channel |
| | Formats Uncompressed | 16, 24, 32-bit PCM @ 48 kHz |
| **Channel Origination** | Integrated Channel Playout | Up to 3 live inputs, 2 independent program outputs |
| | Master Control Switching | Frame-accurate transitions between live and recorded clips |
| | Clip Playout | 2 HD channels |
| | Branding & Graphics | Adobe Creative Suite authoring<br>8 keyers (graphics layers)<br>Background layer (clip or live)<br>Single layers from clip or live inputs<br>Dual DVE for playout of two clips or live inputs<br>Independent branding for simulcast channels<br>External key, fill inputs<br>3-point animations<br>Dynamic text substitution from Astra or external source |
| | Typefaces | All standard font formats are supported |
| **Playout** | Media Ports | 2 playout ports (decoder) |
| **Integration** | Dedication | Videoserver for playout, Integrated Channel Playout |
| | Automation | ASTRA Studio, ASTRA MCR, ASTRA MAM |
| | NRCS | ActiveX component for all major NRCS systems (iNEWS, ENPS, Octopus) |
| | MAM | Thumbnail generator, Watch folder file ingest |
| **Storage** | Capacity | Up to four 6 TB hot-swappable SATA drives, 12 TB usable (450 hours at 50 Mbps) |
| | Redundancy | RAID 10 |
| **Power** | Power Supply | Dual redundant, hot-swappable |
| | Input Voltage Range | 100-240 V, 50-60 Hz |
| | Power Consumption | Max 200 W |
| **Physical** | Dimensions | 1U, depth 65 cm / 25.6 in |
| | Weight | 16.33 kg / 36 lbs. |
| **Environmental** | Operating Temperature | +5° to +35° C |
| | Operating Humidity | 8% to 90% non-condensing |