



SaviStreamer E300 Encoder

**Full HD, Low-Bandwidth
1080p Streaming Encoder**



**Capture and stream or record high-
definition A/V signals from a media
source and create a seamless
extension over IP to one or more
decoder units**

Quick Start Guide

INTRODUCTION

The E300 video distribution over IP solution consists of an E300 encoder and decoders that can extend or record up to 3840x2160 @30Hz video and audio over a standard network at user-defined low bit rates for excellent quality and minimal network bandwidth consumption. The E300 encoder streams or records high-quality video and audio and uses the H.264 video compression standard. It can stream to D300 decoders or any device or PC that supports the required network protocols. It can also record to a shared network or NAS drive.

FEATURES

- Extend and record up to 3840X2160 @30Hz video and audio
- H.264 compression for high-quality, low-bandwidth AV-over-IP
- Support for wide-screen and standard aspect ratios for multiple resolutions
- Scale streams before distribution for lower bandwidth consumption
- HDMI or analog audio support
- Record up to 1080p@60Hz/1920x1200 to a shared network drive
- Recorded user-defined file name includes timestamp for easy file management
- Operates on standard 100/1000Mb Ethernet networks
- Network bit-rate control (100 Kbps – 25 Mbps)
- Fine-tune encode/decode parameters and adjust bit rates
- Reliable, solid-state, energy-efficient design
- Local real-time pass-through and confidence preview on encoder
- User access from secured PC

APPLICATIONS

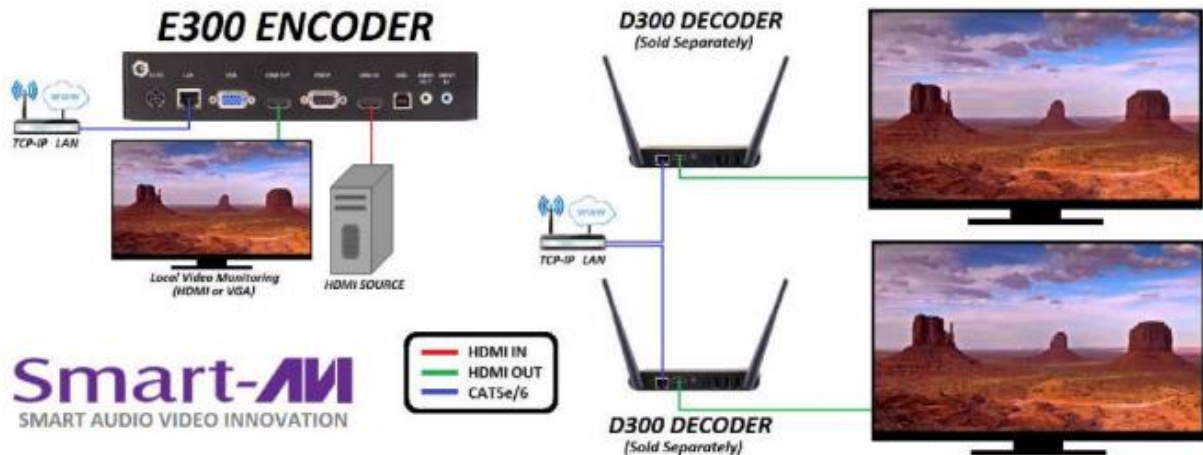
- Retail Store Displays
- Business Lobbies
- Restaurants
- Digital Signage
- Airports & Transportation Hubs
- Hospitals
- Schools & Universities

WHAT'S IN THE BOX

PART NO.	QTY	DESCRIPTION
SAVI-D300-S	1	Streaming Encoder
PS5VDC2A	1	Power Adapter
	1	Quick Start Guide

TECHNICAL SPECIFICATIONS

VIDEO	
Interfaces	1xHDMI2.0A Output, 1xCVBS Output, 1xOptical Output
Video Decoding	VP9-10 Profile-2 up to 4Kx2K @60fps H.265 HEVC MP-10 @L5.1 up to 4Kx2K @60fps H.264 AVC HP @L5.1 up to 4Kx2K @30fps H.264 MVC up to 1080P @60fps MPEG-4 ASP @L5.1 up to 1080P @60fps WMV/VC-1 SP/MP/AP up to 1080P @60fps AVS-P16(AVS+)/AVS-P2 JiZhun Profile up to 1080P @60fps MPEG-2 MP/HL up to 1080P @60fps MPEG-1 MP/HL up to 1080P @60fps RealVIDEO 8/9/10 up to 1080P @60fps Support MKV/WMV/MPG/MPEG/DAT/ AVI/MOV/ISO/MP4/RM
AUDIO	
Audio Decoding	MP3, AAC, WMA, RM, FLAC, Ogg and programmable with 7.1/5.1 down-mixing I2S audio interface supporting 8-channel (7.1)input and output Built-in serial digital audio SPDIF/IEC958 output and PCM input/output Stereo digital microphone PDM input Built-in stereo audio DAC Supports concurrent dual audio stereo channel output with combination of analog+PCM or I2s+PCM
NETWORK	
WIFI	2.4GHz/5.8GHz Dual Band
Ethernet	10M/100M/1000M
Interfaces	1x1000M LAN Port
CONTROL	
IR Remote Control	IR RC5
USB	Keyboard and Mouse
OTHER	
CPU	Amlogic S912 Octa Core Cortex-A53
GPU	Mali-T820MP3
RAM	3GB
ROM	32GB
Interfaces	3xUSB2.0 Host
Power Adapter	5 VDC 2 A
Weight	.45 lbs. (D300 Decoder Only)
Dimensions	6"W X 5"D X 1"H
Working Temp.	32 to 122°F (0 to 50 °C)
Working Humidity	Up to 85% RH (no condensation)
Storage Temp.	-4 to 149 °F (-20 to 65 °C)
Storage Humidity	Up to 90% RH (no condensation)



HARDWARE INSTALLATION

1. Position the E300 conveniently and keep it unplugged.
2. Connect the E300 HDMI IN connector to an HDMI Source.
3. Optionally connect a VGA or HDMI display to the E300 VGA or HDMI OUT connector for local monitoring of the streaming video signal and power on the display.
4. Connect the RJ45 LAN port on the E300 to your network.
5. Power on the E300 Encoder and wait a few seconds for the unit to initialize.
6. Use the SaviStreamer software to identify the IP address of the E300 and make note of it. Further instructions on this will be located below in the SaviStreamer software section.
7. Power off the E300.
8. See the D300 Decoder documentation to set up the decoder at this point. When the D300 is ready, continue with the next step.
9. Power on the E300 Encoder and wait a few seconds for the unit to initialize.
10. Power on the connected video source and start streaming to the E300.
11. If needed, power cycle or reboot the D300 Decoder to start displaying the video stream.



Figure 1

SaviStreamer

SaviStreamer Manager is our free software that allows for easy configuration and control of your SaviStreamer devices from the convenience of a single workstation. With a simple interface, robust security, and full customizable settings, SaviStreamer Manager will have you routing enthralling streams in no time!

Getting Started:

To ensure proper installation, please:

- Use at least Windows XP Professional (w/ Server Pack 2-3), Windows 2003, or Vista operating systems.
- Log into system as system administrator
- Turn off Windows Firewall or select SaviStreamer Manager under firewall exceptions tab in control panel.
- If you do not wish to turn off firewalls or make an exception for SaviStreamer Manager, please contact SmartAVI's technical support for alternative processes.

Installation:

SaviStreamer Manager requires a unique serial number to be installed. Find the serial key code on the back of the SaviStreamer Manager CD sleeve and input the code when prompted. In addition, you must also complete online registration for your copy of the software: if you do not complete registration within the 30 day window, your copy of SaviStreamer Manager will become disabled. A registration window will open automatically; if you want to register your copy of the software at a later date, simply select 'Help/Registration' and click 'Start Trial'. For more information, please see our Frequently Asked Questions or contact SmartAVI technical support.

1. Insert software CD; read the auto-run's License Agreement and press 'I Agree'.
2. Enter your name, company, and unique serial number (ALL CAPS) in the spaces provided.
3. Choose Components you wish to install: make sure to include 'SaviStreamer Manager'.
4. Choose a location to install SaviStreamer Manager and click next.
5. After installation is complete, click 'Finish' to exit the installer.

Start-Up

Managing Passwords

To ensure secure communication between SaviStreamer Manager software and your SaviStreamer devices, you must set an Environment Password, as well as Unit Passwords for each device.

Environment Password

The Environment Password secures access to any SaviStreamer devices in your connected network, so you can manage and adjust settings for every connected streaming device with ease. Upon start-up, provide a case-sensitive password between 5-8 alphanumeric characters long, then confirm the password to continue.

Unit Password

When connecting a new SaviStreamer device to your network environment, you must manually assign it a Unit Password. Unit Passwords match the Environment Passwords by default, so just enter the active Environment Password to establish connections.

Updating Passwords

To change or adjust passwords, simply open the Settings tab in SaviStreamer Manager and click 'Change Password'. Provide the old password you wish to change, then input the desired new password, and confirm it to complete the update. When updating your Environment Password, all connected SaviStreamer devices' Unit Passwords will also update to the new Environment Password.

For more information about password protection, please contact SmartAVI's Technical Support team.

Managing Streams and Environment

Managing SaviStreamer Devices

E300 Encoders will automatically be detected by the SaviStreamer Manager. If it is unable to detect any SaviStreamer encoders on the network, the software also allows for adding new SaviStreamer encoders to your streaming environment by clicking the Add button (+) in the top left corner of the manager and input the unit's *IP address. Once SaviStreamer Manager has discovered your E300 Encoder and displays a 'Ready' message, simply double click the device and a new settings page will open. Listed below are details of each tab where the settings can be customized to your preference, or simply use the default settings provided and click 'Start encoding' to begin streaming!

**If you are unsure of a device's IP address, please use Network Finder, a free device IP finder available at www.smartavi.com/helpful-links*

Processing Control

Optimize streams by assigning signal settings for your media. This includes:

- Capture: audio-video recording settings, such as resolution and sampling rates.
- Encoding: customizable video and audio settings for enhanced formatting as H.264 media.
- Streaming/Recording: Signal assignment for specific ports and remote IP streams.

Output Control

Assign streams to display on locally connected devices; adjust display settings for optimized playback.

Network control

Assign connection settings for optimal performance over a given network. Assign dynamic or static IP addresses. By default, IP addresses are assigned dynamically (DHCP)

RS-232 Control

Enable communication between remote SaviStreamer devices and RS-232 connected workstations.

Troubleshooting Tips

Password Error and performing Factory Reset

The device can be reset to default factory settings to allow for a new password to be easily set for the environment and all units attached. To do so, follow the steps below:

1. On the front of the E300 Encoder, there is a Reset button that can be accessed. The green light above will turn orange after holding the button down for approximately 5 seconds, keep holding it down for an additional 5-10 seconds to ensure it fully resets.
2. Once the E300 Encoder reboots, the SaviStreamer Manager will detect the device and display it in green.
3. Go to the "Settings" tab on the top and select "Change Password".
4. Update the Environment Password from the box that pops up.
5. Go back to the Environment and hover over the detected E300 Encoder. A keyhole icon should appear, click on it and a new box will pop up.
6. Make sure to check mark both boxes (only 1 will be checked) and type in the same Environment Password that was set in Step 3.
7. Once updated, a notification will appear saying the password was updated successfully and you should now be granted access to the E300 Encoder to control.