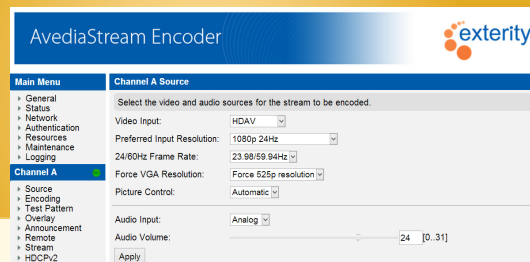


AvediaStream Encoder e2635

The AvediaStream e2635 encoder delivers SD, MPEG-2 or H.264 streams from a range of video inputs over your existing network. It encodes and distributes content from sources with HDMI®, VGA or component video outputs such as Blu-Ray/DVD Players, set top boxes, digital cameras, digital signage systems and PCs. Content protected or sensitive video can be fully secured with HDCPv2.

- Outputs MPEG-2 Transport Streams over UDP or RTP as IP multicast or unicast
- MPEG-2 or H.264 video encoding
- SD or Sub-SD encoding
- MPEG-2 AAC or MPEG-1 Layer II audio encoding
- Video input options: HD AV, RGBHV or YPbPr
- Audio input options: HD AV, Unbalanced Stereo or S/PDIF
- Hot swap blade allows quick and non-intrusive upgrade to existing installations using Exterity chassis options (c1101, c1103, c1110)
- Content protection via HDCPv2



Technical Specifications

Interfaces

Video Input:

- HD AV (HDMI style connector), with HDCP (see Content Protection section for more details),
- RGBHV (15-pin D-type)
- YPbPr (Component) using adaptor

Audio Input:

- HD AV (Embedded)
- Unbalanced Line Level stereo (RCA). 2V p-p 75Ω
- S/PDIF Digital Audio (RCA). 0.5V p-p 75Ω

IR out (3.5mm jack socket)

802.3 10/100BaseT Ethernet (RJ45 chassis socket)

Serial RS232 Port for local administration (RJ45 chassis socket)

Streaming

- Single program MPEG-2 transport streams (ISO/IEC 13818-1)
- RTP
- UDP
- IP unicast
- IP multicast
- IGMP Join Group for enhanced switch compatibility
- Up to 80Mbps total stream output

Content Protection

- HDCPv2 content protection (encryption to protect output stream, enforced on HDCP protected input, optional otherwise)
- Up to 32 end points supported
- Enabled by MAC locked licence (AvediaServer V6.1 or greater required to deploy licence)
- Encoder hardware security tamper proofing required (check with support@exterity.com for more information)

Channel Management

- Channel announcement via SAP/SDP
- Up to ten simultaneous stream destinations
- Multicast/unicast address selection (automatic or manual)
- Configurable name, number and group membership

Management

- Fully integrated with Exterity management tools
- Network administration via SSH, Telnet and SNMP
- HTTP web interface (supported browsers: Firefox, Internet Explorer and Chrome, check with support@exterity.com for version information)
- Serial RS232 Admin Port
- Terminal Control Interface (TCI)
- Event logging via Syslog (local and remote)
- Firmware upgrade via TFTP
- Configuration backup/restore via TFTP

Video Input

PC, HD, ED, SD auto-switching

Resolutions supported:

- 1080p 23.98Hz/24Hz/50Hz/59.94Hz/60Hz,
- 1080i 50Hz/59.94Hz/60Hz,
- 720p 50Hz/59.94Hz/60Hz,
- 525p 60Hz and 625p 50Hz,
- 480/525i 60Hz and 576i/625i 50Hz (HD AV/YPbPr),
- WXGA (1280×768) 60Hz,
- SXGA (1280×1024) 60Hz,
- XGA (1024×768) 60Hz/75Hz,
- SVGA (800×600) 60Hz/75Hz/85Hz,
- VGA (640×480) 60Hz/75Hz/85Hz

HD 16:9 aspect ratio

SD 4:3/16:9 aspect ratio

Video Encoding

MPEG-4 part 10 H.264 (ISO/IEC 14496-10)

- High Profile @ Level 4

MPEG-2 (ISO/IEC 13818-2)

- Main Profile @ Main Level

Video resolution: 240p, 525i, 625i

Bit rate: 128kbps – 15Mbps

Frame rate: 12Hz – 60Hz

Constant or variable bit rate

Audio Encoding

- MPEG-1 Layer II (ISO/IEC 11172-3)
- AAC
- Encoding bit rate 48kbps – 384kbps
- Audio sampling rate 48kHz

Additional Features

Watermarking (encode customisable text and logo onto video)

Test pattern generation

Automatic streaming of fixed colour/test pattern on loss of video

AvediaStream Encoders									
		e2310	e2320	e2635	e3635	e3535	e2655	e3655	e3555
Encoding	HD 1080p					✓			✓
	HD 1080i/720p				✓	✓		✓	✓
	SD	✓	✓	✓	✓	✓	✓	✓	✓
	H.264	✓	✓	✓	✓	✓	✓	✓	✓
	MPEG-2	✓	✓	✓	✓		✓	✓	
	HDCPv2 Content Protection			✓	✓		✓	✓	
	Software Scaler	✓	✓						
	Hardware Scaler			✓	✓	✓	✓	✓	✓
	MPEG-1 Layer II Audio	✓	✓	✓	✓	✓	✓	✓	✓
	Stereo AAC Audio			✓	✓	✓	✓	✓	✓
Video Input	Composite	✓	✓						
	S-Video	✓	✓						
	SD Component	✓	✓	✓	✓	✓			
	HD Component			✓	✓	✓			
	RGBS	✓	✓						
	RGBHV			✓	✓	✓			
	HD AV			✓	✓	✓			
	SD SDI						✓	✓	✓
	HD SDI						✓	✓	✓
	3G SDI						✓	✓	✓
Audio Input	Line Level Stereo Audio	✓	✓	✓	✓	✓			
	Embedded Audio			✓	✓	✓	✓	✓	✓
	PCM digital Audio			✓	✓	✓	✓	✓	✓
	IR Out	✓	✓	✓	✓	✓			
	Inputs	1	2	1	1	1	1	1	1

Table 1. Encoder Comparison Table

System

- CPU: ARC 500MHz
- RAM: 512MB
- Flash: 128MB (for firmware and configuration)
- OS: Linux 2.6

Network

- Linux IPv4 stack
- DHCP or Static IP addressing
- IEEE 802.3u 10/100Mbps MDIX Ethernet

Protocols

IP (RFC 791), UDP (RFC 768), TCP (RFC 793), ARP (RFC 826), DNS (RFC 1035), DHCP (RFC 2131), ICMP (RFC 792), IGMP (RFC 3376), TFTP (RFC 1350), HTTP (RFC 2616), Telnet (RFC 318) Syslog (RFC 3164), NTP (RFC 1305), SAP (RFC 2974), SDP (RFC 4566), RTP (RFC 3550), SNMP (v1, v2c -RFC 1901)

Regulatory

CE:

EN55022: 2006, EN61000: 2006, EN55024:2003, IEC 60950-1: 2005 Second Edition /EN 60950-1: 2006 + A11:2009

UL/CSA:

47CFR: 2008, ANSI C63-4: 2003, CSA 60950-1-07, 2nd Ed. UL 60950-1, 2nd Ed.

Physical Format

Modular hot swap blade for Exterity chassis

- AvediaStream c1101 providing 1 input
- AvediaStream c1103 providing up to 3 inputs
- AvediaStream c1110 providing up to 10 inputs

Dimensions

L: 275mm x W: 130mm x H: 40mm

Weight

0.5kg

Environment

- Operating: 0 ...+40°C / +32 ... +104°F
- Storage: -20 ...+70°C / -4 ... +158°F
- Operating and storage Relative Humidity: 10-90% (non-condensing)

Power

DC 24V: 12W Typical, 14W Maximum

MTBF

Calculated to MIL-HDBK-217F, notice 2: 84933 hours (9.7 years)

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