

# AvediaStream e3635



The AvediaStream e3635 encoder delivers HD or SD, MPEG-2 or H.264, streams from a range of video inputs over your existing IP network. It encodes and distributes content from sources with HDMI<sup>®</sup>, VGA or component video outputs such as Blu-Ray/DVD Players, set top boxes, digital cameras, digital signage systems and PCs. Accepts video inputs up to 1080p and encodes at resolutions from 240p to 1080i.

Key features include:

- Outputs MPEG-2 Transport Stream over UDP or RTP as IP multicast or unicast stream
- MPEG-2 or H.264 video encoding
- 1080i, 720p, ED, 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 module allows quick and non-intrusive upgrade to existing installations



e3635 Blade

	e2310	e2320	e3522	e2635	e3635	e3535	e2655	e3655	e3555
Encoding	HD 1080p					✓			✓
	HD 1080i		✓		✓	✓		✓	✓
	SD	✓	✓	✓	✓	✓	✓	✓	✓
	H.264	✓	✓	✓	✓	✓	✓	✓	✓
	MPEG-2	✓	✓		✓	✓		✓	✓
Video Inputs	Composite	✓	✓	✓					
	S-Video	✓	✓						
	SD Component	✓	✓	✓	✓	✓			
	HD Component			✓	✓	✓			
	RGBS		✓						
	RGBHV				✓	✓			
	HD AV				✓	✓			
	SD SDI							✓	✓
	HD SDI							✓	✓
	3G SDI							✓	✓
Audio Inputs	Line Level Stereo Audio	✓	✓	✓	✓	✓			
	Balanced Audio			✓					
	Embedded Audio				✓	✓	✓	✓	✓
	PCM Digital Audio			✓	✓	✓	✓	✓	✓
	IR Out			✓			✓		

Table 1. Encoder Comparison Table

Chassis

- C1
- C3
- C10

Resolution

- SD
- ED
- HD
- PC

# Technical Specifications

## Interfaces

### Video Input:

HD AV (HDMI style connector, note HDCP encrypted content is not supported),  
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

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

## 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)

Serial RS232 Admin Port

Telnet 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),  
UXGA (1600×1200) 60Hz,  
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, 525p, 625p, 720p, 1080i

Bit rate: 128kbps – 20Mbps

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

## 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

## Protocol

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.

## Power

DC 24V: 14W Typical, 16W Maximum

## 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)

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