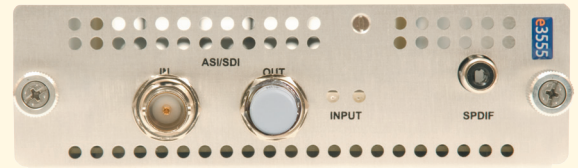
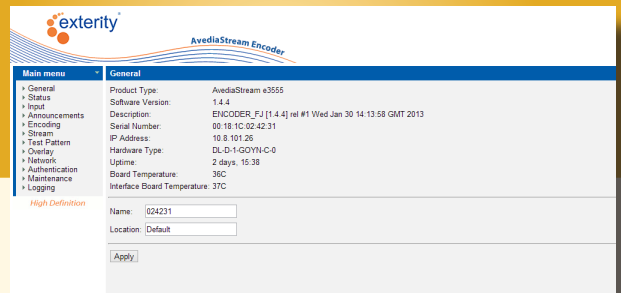


# AvediaStream e3555



The AvediaStream e3555 encoder streams pre-recorded and live TV (news, sports, entertainment, educational) HD and SD channels over your existing network. It encodes and distributes content from 3G SDI, HD SDI or SDI broadcast sources such as professional cameras and recorders to an IP network. It can upscale to 1080p or downscale to SQCIF.

- Easy Setup
- Hot swap module allows quick and non intrusive upgrade to existing installations
- Accepts 3G/HD/SDI input resolutions and scales to standard TV resolutions
- 1080p, 1080i, 720p, HD, SD or Sub SD Encoding
- MPEG-2 AAC or MPEG-1 layer 2 audio encoding
- Audio Input Options: Embedded Audio or S/PDIF
- H.264 video encoding from devices such as professional cameras and recorders
- Pass-through output for chaining devices.
- Embedded system for high reliability and low power consumption
- Frame rate and audio sample rate conversion



## Technical Specifications

### Interfaces

#### Video Input:

- 3G SDI - SMPTE 424M
- HD SDI - SMPTE 292M
- SDI - SMPTE 259M
- (BNC) 1.75V p-p 75Ω

#### Audio Input:

- 3G SDI, HD SDI or SDI (Embedded, single audio pair from eight available)
- S/PDIF Digital Audio (RCA). 0.5V p-p 75Ω

802.3 10/100BaseT Ethernet (RJ-45 chassis socket)  
Serial RS232 Port for local administration (RJ-45 chassis socket)

### Streaming

- Up to 80Mbps output per blade
- Single program MPEG-2 transport streams (ISO/IEC 13818-1)
- RTP
- UDP
- Multi IP unicast (up to 10 simultaneous locations)
- IGMP
- Channel announcement using SAP/SDP
- Video only option

### Administration Interface

- Configurable aspect ratio override
- Multicast/unicast address selection (automatic or manual)
- Configure name, number and group membership

### Management

- Fully integrated with all Exterity management tools
- Network administration via HTTP web interface, SNMP & Telnet
- Serial RS232 Admin Port
- Telnet Control Interface (TCI)
- Event logging via Syslog (RFC 3164) local and remote
- Firmware upgrade via TFTP
- Configuration backup/restore via TFTP

### Video Input

HD and SD auto-switching

Resolutions supported:

1080p 23.98Hz/24Hz/50Hz/59.94Hz/60Hz,  
1080i 50Hz/59.94Hz/60Hz,  
720p 50Hz/59.94Hz/60Hz,  
525i 60Hz and 625i 50Hz

HD 16:9 aspect ratio

SD 4:3/16:9 aspect ratio

### Audio Encoding

Stereo:

- MPEG-1, Layer 2 or MPEG-2 AAC (LC profile)
- Encoding bit rate 48kbps – 384kbps
- Audio sampling rate 32kHz, 44.1kHz or 48kHz
- Audio sample rate conversion

## MPEG-4 Encoding

HD: H.264 High Profile Level 4.0

SD: H.264 Main Profile Level 3.0

- Sub-SD 100kbps - 10Mbps
- 525i/625i 500kbps - 15Mbps
- 525p/625p 1Mbps - 15Mbps
- 720p 2Mbps - 20Mbps
- 1080i/1080p24 3Mbps - 24Mbps
- 1080p50/60 4Mbps - 30Mbps
- Constant or variable bitrate
- SQCIF, QCIF, CIF, DCIF, QVGA, HVGA, VGA, WVGA, FWVGA, D1, ED, 720p, 1080i, 1080p video resolutions
- Frame rate conversion

## Additional Features

Watermarking (encode customisable text into stream)  
 Test pattern generation  
 Automatic streaming of fixed colour/test pattern on loss of video

## System

- CPU: MIPS 4Kc 492MHz
- RAM: 64MB
- Flash: 16MB (for firmware and configuration)
- OS: Linux 2.6

## Protocols

IP (RFC791), UDP (RFC768), TCP (RFC793), ARP (RFC826), 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 (RFC2974), SDP (RFC4566), SNMP (v1, v2c - RFC1901)

## 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 60950-1-03, 1st Ed. UL 60950-1, 1st 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

## Power

DC 24V: 12W Typical, 14W Maximum

## Environment

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

## Dimensions

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

## Weight

0.5kg

## AvediaStream Encoders

	e2310	e2320	e3522	e2635	e3635	e3535	e2655	e3655	e3555
Encoding	HD 1080p					✓			✓
	HD 1080i			✓		✓		✓	✓
	SD	✓	✓	✓	✓	✓	✓	✓	✓
	H.264	✓	✓	✓	✓	✓	✓	✓	✓
	MPEG-2	✓	✓		✓	✓		✓	
	Software Scaler	✓	✓	✓					
	Hardware Scaler				✓	✓	✓	✓	✓
	MPEG-1 Layer II	✓	✓	✓	✓	✓	✓	✓	✓
	Stereo AAC				✓	✓	✓	✓	✓
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	✓	✓	✓	✓	✓			
	Balanced Audio			✓					
	Embedded Audio				✓	✓	✓	✓	✓
	PCM digital Audio			✓	✓	✓	✓	✓	✓
	IR Out			✓			✓		

Table 1. Encoder Comparison Table

### Headquarters

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Leading IPTV Delivery

