

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.

Additional benefits include:

- 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



e3555 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
- HD

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

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

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

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

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

Power

DC 24V: 12W Typical, 14W 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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