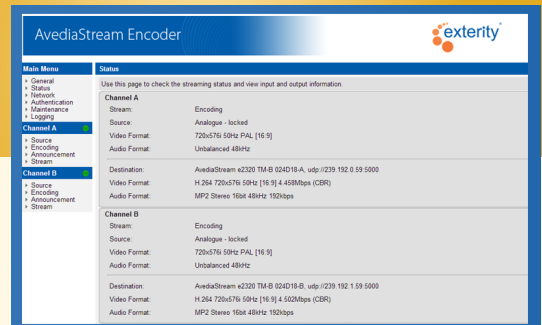


AvediaStream e2320



The AvediaStream e2320 encoder streams video (news, sports, entertainment, educational) channels over your existing network. It encodes and distributes content from a wide range of sources such as DVD Players, set top boxes and digital cameras to an IP network. The e2320 is a dual encoder so can stream simultaneously from two independent video sources.

- Outputs MPEG-2 Transport Stream over UDP or RTP as IP multicast or unicast stream
- Dual encoder in single blade for cost-effective installations
- MPEG-2 or H.264 video encoding
- SD or Sub-SD encoding
- MPEG-1 Layer II audio encoding
- Video inputs: Composite, SD Component, RGBS, S-Video (adaptor required)
- Audio inputs: Unbalanced Stereo
- Hot swap blade allows quick and non-intrusive upgrade to existing installations using Exterity chassis options (c1101, c1103, c1110)
- Embedded system for high reliability and low power consumption



Technical Specifications

Interfaces

Video Input:

- Dual inputs providing Composite (RCA), Component (RCA), S-Video (RCA) and RGBS (RCA) (only channel A can input RGBS)
- 1V p-p 75Ω

Audio Input:

- Unbalanced Line Level stereo (3.5mm jack socket)
- 2V p-p 75Ω

IR out (3.5mm jack socket- not enabled at this firmware release)

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

Management

- Fully integrated with Exterity management tools
- Network administration via SSH, Telnet and SNMP
- HTTP web interface (Supported browsers Firefox, Internet Explorer (IE8 onwards) 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

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

Video Input

- PAL, SECAM, NTSC auto-switching
- Resolutions supported: 525i (480i) 60Hz and 625i (576i) 50Hz
- 4:3 / 16:9 aspect ratio
- Wide Screen Signalling for automatic aspect ratio switching

Video Encoding

- MPEG-4 part 10 H.264 (ISO/IEC 14496-10)
- High Profile @ Level 3 (profile user configurable)
- MPEG-2 (ISO/IEC 13818-2)
- Main Profile @ Main Level
- Configurable GOP structure option with all encoding profiles

Output Video Resolution:

- 525i input: SQCIF (128x96p), QVGA (320x240p), SIF (352x240p), 525i (720x480i)
- 625i input: SQCIF (128x96p), QVGA (320x240p), CIF/SIF (352x288p), 625i (720x576i)
- Bit rate: 128kbps – 15Mbps
- Frame rate: 12Hz – 60Hz
- Constant or variable bit rate

Audio Encoding

- MPEG-1 Layer II (ISO/IEC 11172-3)
- Stereo encoding bit rate 64kbps – 384kbps
- Mono encoding bit rate 48kbps
- Audio sampling rate 48kHz

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: 2010, EN61000-4-2: 1995 + A1 + A2, EN61000-4-3: 1996, EN61000-4-4: 1995, EN61000-4-6: 1996, EN55024:2003, IEC 60950-1:2005 (Second Edition), Am 1: 2009

UL/CSA

- 47CFR: 2008 Part 15, Sub Part B, ANSI C63-4: 2003
- CAN/CSA C22.2 No. 0-M, CAN/CSA C22.2 No. 60950-1-07, UL 60950-1, 2nd Edition

Environment

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

Physical Format

Modular hot swap blade for Exterity chassis

- AvediaStream c1101 providing up to 2 inputs
- AvediaStream c1103 providing up to 6 inputs
- AvediaStream c1110 providing up to 20 inputs

Dimensions

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

Power

DC 24V: 10W Typical, 12W Maximum

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	✓	✓	✓	✓	✓	✓	✓	✓	✓
Video Input	Stereo AAC				✓	✓	✓	✓	✓	✓
	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

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Leading IPTV Delivery

