

AvediaStream e3730 HDCP 32 Encoder

HDMI encoder which delivers HDCPv2.2 protected premium or sensitive IP video streams to up to 32 end points. It encodes HD or SD H.264 streams from an HDMI video input over your existing network, including sources such as satellite set top boxes, digital cameras, digital signage systems, PCs and Blu-Ray/DVD Players.



Interfaces

- Video Input
 - HDMI interface with HDCP (see Content Protection section below)
- Audio Input
 - HDMI (Embedded)
- 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis socket, dual Ethernet features for redundancy purposes require c1210 chassis)
- Serial RS232 Port for local administration (RJ-45 chassis socket)
- IR Out (3.5mm jack socket)

Streaming

- Single program MPEG-2 transport stream (ISO/IEC 13818-1)
- UDP
- IP unicast
- IP multicast
- IGMP Join Group for enhanced switch compatibility
- Up to 30Mbps total stream output

Channel Management

- Channel announcement via SAP/SDP
- Multicast/unicast address selection (automatic/ manual)
- Configurable name, number and group membership

Content Protection

- HDCPv2.2 content protection (encryption to protect output stream, enforced on HDCP protected input, optional otherwise)
- Up to 32 end points supported

Management

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

Video Input

- Automatic detection of resolution and frame rate
- Resolutions supported:
 - 1080p 50Hz/59.94Hz
 - 1080i 50Hz/59.94Hz
 - 720p 50Hz/59.94Hz
 - 480p/525p 59.94Hz & 576p/625p 50Hz
 - 480i/525i 59.94Hz & 576i/625i 50Hz
- HD 16:9 aspect ratio
- SD 16:9 aspect ratio

Video Encoding

- MPEG-4 part 10 H.264 (ISO/IEC 14496-10)
 - High Profile @ Level 4
- Video resolution: 525i, 525p, 625i, 625p, 720p, 1080i, 1080p
- Bit rate: 500kbps – 30Mbps
- Frame rate: 50Hz, 59.94Hz
- 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

Enhanced Features

- Test pattern generation
- Automatic streaming of fixed color/ test pattern on loss of video

Scaler

- Dedicated hardware scaler
 - User-configurable up/down scaling
 - User-configurable frame rate adjustment

System

- CPU: Power Architecture e500 1Ghz
- RAM: 512 MB
- Flash: 528MB (for firmware and configuration)
- OS: Linux 3.12

Network

- Linux IPv4 stack
- DHCP or Static IP addressing
- Two IEEE 802.3u 10/100/1000Mbps MDIX Ethernet interfaces

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), Syslog (RFC 3164), NTP (RFC 1305), SAP (RFC 2974), SDP (RFC 4566), RTP (RFC 3550), SNMP (v1, v2c -RFC 1901)

Dimensions

- L: 275mm x W: 130mm x H: 40mm; weight 0.5kg

Physical Format

- Modular hot swap blade for Exterity chassis
- AvediaStream c1101 (1 inputs)
- AvediaStream c1103 (up to 3 inputs)
- AvediaStream c1210 (up to 10 inputs)

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: TBC

Regulatory

- **CE**
 - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
 - EN55024:2010 + A1:2015
 - EN 61000-3-2:2014
 - EN 61000-3-3:2013
 - IEC 60950-1:2005 (Ed. 2.0) + Am 1:2009 +Am 2:2013
 - EN60950-1 2006 + A11:2009, A1:2010, A12:2011, A2:2013
- **UL**
 - UL60950-1/CSA C22.2 No. 60950-1, Second Edition. Rev. October 14, 2014

FCC

- 47CFR:2011 Part 15, Sub Part B
- ANSI C63-4:2009

ACMA

- EN 55022:2010 +AC2011
- AS/NZS 60950.1.2011 +A1

MTBF

- Calculated to MIL-HDBK-217F, notice 2: 53637 hours (6.1 years)

			e2320	e3730-std	e3730-hdcp-32	e3730-hdcp-pro	e3732-std	e3732-hdcp-32	e3732-hdcp-pro	e3655	e3555	e5640	
INPUT	Source	IR Out (source control)	✓	✓	✓	✓	✓	✓	✓				
		Inputs	2	1	1	1	2	2	2	1	1	4	
	Video Input	Composite	✓										
		S-Video	✓										
		SD Component	✓										
		RGBS	✓										
		HDMI		✓	✓	✓	✓	✓	✓				✓
		SDI (SD,HD,3G)									✓	✓	4
	Display Port											✓	
	Audio Input	Line Level Stereo Audio	✓										
Embedded Audio			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
PCM Digital Audio										✓	✓		
OUTPUT	Encoding	UHD 2160p										✓	
		HD 1080p		✓	✓	✓	✓	✓	✓		✓	✓	
		HD 1080i/720p		✓	✓	✓	✓	✓	✓	✓	✓	✓	
		SD	✓	✓	✓	✓	✓	✓	✓	✓	✓		
		HEVC											✓
		H.264	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		MPEG-2	✓								✓		✓
		HDCPv2 Content Protection			✓				✓				
		HDCP Professional Content Protection				✓				✓			
		Video Scaler	✓		✓	✓			✓	✓	✓	✓	✓
		MPEG-1 Layer II Audio	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
		Stereo AAC Audio		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Streaming	UDP Multicast	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓