

## AvediaStream e3730 Standard Encoder

Standard HDMI encoder which delivers 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
- Audio Input
  - HDMI (Embedded)
- 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis socket)
- Serial RS232 Port for local admin (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

### 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

### Scaler

- Dedicated hardware scaler
  - Automatic scaling to nearest supported resolution
  - Automatic 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
- IEEE 802.3u 10/100/1000Mbps MDIX Ethernet interface

## 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)

## 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, 2nd Edition. Rev. Oct 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

## Dimensions

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

## Physical Format

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

## 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                        | ✓     | ✓         | ✓             | ✓              | ✓         | ✓             | ✓              | ✓     | ✓     | ✓     |