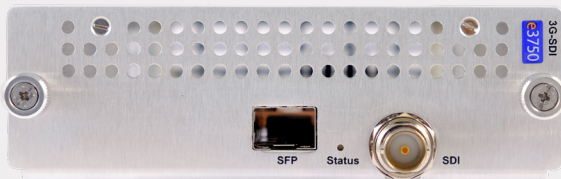


e3750 Encoder

Single 3G-SDI H.264 Encoder



Single 3G-SDI encoder which delivers HD or SD H.264 streams from an SDI video input over your existing network.

Interfaces

- BNC SDI interface supporting:
 - 3G SDI - SMPTE 424M – Level A only
 - HD SDI - SMPTE 292M
 - SDI - SMPTE 259M
 - 1.75V p-p 75Ω
- SFP interface supporting the following Embrionix SFP modules:
 - Optical SDI input (EB60LC2R-MN2-P)
 - Optical SDI output (EB60LC2T-MN2-13F)
 - HD-BNC SDI input (EB30HD2R-LN)
 - HD-BNC SDI output (EB30HD2T-LN)
 - DIN SDI input (EB30CS2R-LN)
 - ST2022-6 input (EB22LC2B-SN & emOPT-2D-2022-6)
- Embedded audio extracted from active video input (BNC or SFP), single audio pair from eight available
- Two 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis sockets, dual Ethernet features for redundancy purposes require c1210 Chassis)
- Serial RS232 Port for local administration (RJ-45 chassis socket)

Streaming

- Single program MPEG-2 transport streams (ISO/IEC 13818-1)
- UDP/RTP
- IP unicast / IP multicast
- IGMP Join Group for enhanced switch compatibility
- Up to 200Mbps total stream output

Channel Management

- Channel announcement via SAP/SDP
- Up to 10 simultaneous stream destinations
- Multicast/unicast address selection (automatic/manual)
- Configurable name, number and group membership

Features & Benefits

- Stream HD or SD H.264 streams from an SDI video input over your existing network
- Minimise glass-to-glass latency with full multicast delivery when streaming live video
- Deliver single program MPEG-2 transport streams
- Highly reliable modular blade-into-chassis design allows 'hot swapping' to minimise downtime

Video Input

- Automatic detection of resolution and frame rate
- Resolutions supported:
 - 1080p 23.98Hz/24Hz/50Hz/59.94Hz/60Hz
 - 1080i 50Hz/59.94Hz/60Hz
 - 720p 50Hz/59.94Hz/60Hz
 - 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: 1Mbps – 20Mbps
- Frame rate: 23.98Hz/24Hz/50Hz/59.94Hz/60Hz
- Constant or variable bit rate

Audio Encoding

- MPEG-1 Layer II (ISO/IEC 11172-3)
- AAC
- Encoding bit rate 48kbps – 512kbps
- Audio sampling rate 48kHz

Management

- Fully integrated with management tools:
 - Admin level management using Avedia Server Site Manager application
 - HTTP/HTTPS device web interface; recommended browser: Chrome®
- SNMP
- SSDP device discovery
- RESTful API
- Serial RS232 Admin Port
- Event logging via Syslog (local and remote)
- Firmware upgrade via TFTP
- Configuration backup/restore via TFTP

Scaler

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

Enhanced Features

- Test pattern generation
- Automatic streaming of fixed colour/ test pattern on loss of video
- Watermarking (overlay customisable text or logo onto video)

Network

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

System

- OS: Based on Linux 3.12

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), IPv6 (RFC 8200), DHCPv6 (RFC 8415), SLAAC (RFC 4862), MLD (v2) (RFC 3810), NDP (RFC 4861)

Regulatory

- CE:
 - IEC 62368-1:2014
 - EN62368-1:2014 + A11:2017
 - EN55032:2012 + corrigenda Aug 2012 & Dec 2012
 - EN55024:2010 + A1:2015
 - EN 61000-3-2:2014
 - EN 61000-3-3:2013
- UL/CSA:
 - UL62368-1:2019
 - CSA C22.2 No. 62368-1:19
- FCC:
 - 47CFR:2011 Part 15, Sub Part B
 - ANSI C63-4:2014
- ACMA:
 - AS/NZS 62368.1:2018

Physical Format

- Modular hot swap blade
- c1101 Chassis (1 input)
- c1103 Chassis (up to 3 inputs)
- c1210 Chassis (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)

Dimensions

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

Power

- DC 24V: 14W typical, 20W maximum

MTBF

- Calculated to MIL-HDBK-217F, notice 2: 67783 hours (7.7 years)

In the Box

- e3750 encoder blade, single 3G SDI in, up to 1080p out
- Product Safety Brochure (hard copy)

Ordering Information (P/N)

- 18355 (avstr-e3750) - e3750 encoder