

# AL2000

## LIVE MULTISCREEN ENCODER

### Carrier-grade multi-channel encoder

#### Live inputs:

- MPEG-TS / IP
- HD-SDI

#### Advanced encoding:

- Premium Quality H.264 encoding
- Premium Quality HEVC encoding

#### Adaptive Streaming outputs:

- MPEG-DASH
- Apple HLS
- Microsoft Live Smooth Streaming
- Adobe Flash (RTMP & HDS)
- 3G/4G/eMBMS Mobile TV
- IPTV & PiP
- Ready for catch-up and start-over TV
- Highly integrated, redundant, future-proof design



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## LIVE MULTISCREEN ENCODER

The Allegro DVT AL2000 live multiscreen encoder ingests MPEG-TS/IP or HD-SDI inputs, and delivers live audio/video outputs in all formats simultaneously, adapted to broadcast, IPTV, PiP and Multiscreen/Over-The-Top TV.

Supported formats can then be delivered to various targets such as mobile phones, tablets, set-top boxes, and PC players at the same time, for catching the broadest audience.

AL2000 includes support for MPEG-DASH, Apple HLS, Microsoft Live Smooth Streaming, Adobe Flash RTMP, Adobe HDS, 3G/4G/eMBMS Mobile TV, IPTV and Picture-in-Picture. Adaptive streaming encoding allows viewers to experience the best video quality allowed by their local and instantaneous network conditions.

AL2000 offers proven interoperability with various streaming servers and redundancy with N+P flexible schemes and network teaming. Allegro DVT encoders are easily administered by SNMP or RESTful HTTP API, and can easily be integrated with any existing Management System or DataMiner.

### INPUT

Audio/Video	MPEG-TS / IP 2 SD/HD-SDI 8 embedded stereo audio channels per SDI feed
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### OUTPUT

Video Preprocessing	Adaptive de-interlacing Video cropping and resize Aspect-ratio conversion or pass-through	Frame rate down-conversion Color enhancement Logo & Slate insertion Video preview
Video Encoding	H.264, up to HD HEVC, up to 4K Compliant with CableLabs' EBP	Adaptive Streaming video encoding Up to 16 profiles per service
Audio Preprocessing	Automatic Gain Control Audio level	5.1 and stereo downmix Audio resampling
Audio Encoding	32 audio streams per service Audio pass-through MPEG-1 Layer II	AAC-LC, HE-AAC v1/v2 Dolby Digital Dolby Digital Plus
Transport	Apple HLS Microsoft Live Smooth Streaming Adobe Flash RTMP Adobe HDS MPEG-DASH ISO Base Media File Format	RTP + RTCP for 3GPP / Edge IPTV & PiP: SPTS Supported Protocols: FTP, HTTP, WebDAV, RTMP Embedded Origin Server Catch-up TV or archiving in TS/MP4
Subtitling	DVB-Teletext DVB-Subtitle Closed Caption (CEA-608/708)	Pass-through Conversion to AMF0, SMPTE TTML, WebVTT
Encryption	BuyDRM PlayReady Verimatrix	SecureMedia Common Encryption (CENC) DGI ( <i>DRM Generic Interface</i> )

### OPERATION

Single rack unit (1 RU)  
Up to 8 GbE interfaces per unit  
Network teaming on input/output/management networks  
N+P device redundancy  
SNMP/HTTP RESTful API for remote control & monitoring  
Web GUI  
Software upgradeable  
DataMiner supervision



Allegro DVT is a leading provider of H.264/MPEG-4 AVC|SVC|MVC and HEVC/H.265 solutions, including industry standard compliance test suites, H.264/MPEG-4 AVC and HEVC/H.265 encoder, codec and decoder hardware (RTL) IPs; and multiscreen encoders and transcoders. Allegro DVT products have been chosen by more than 100 major IC providers, OEMs and broadcasters. For more information, visit Allegro DVT's website at <http://www.allegrodvt.com/> broadcast or contact [info@allegrodvt.com](mailto:info@allegrodvt.com).



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