

TITAN

Live

Real-time IP-based transcoder for multi-screen delivery



Increase content value by transcoding for any network

TITAN Live is a real-time multi-channel/format IP-based transcoder for multi-screen delivery (TV, Mobile, and Web). With the support for various encapsulation formats, TITAN Live revolutionizes live content delivery by allowing video service operators to repurpose content over numerous devices such as smartphones, tablets, PCs or web players while maintaining pristine video quality.

Featuring cutting edge technology, 7-RU TITAN Live can ingest SD/HD channels to simultaneously produce multiple streams in real-time and deliver them to streaming/adaptive streaming networks.

TITAN Live can run on the same platform as TITAN File, the ATEME file-based solution for mass content throughput. With this live/file-based convergence on a unique platform, operators can streamline their operational workflow and increase content value within a multi-screen delivery.

KEY FEATURES

- High density multi-profile transcoder (up to 360SD or 90HD)
- MPEG-2/MPEG-4 SD/HD Live inputs
- Built-in supervision for N+M redundancy management
- Compliant with Adobe®, Apple®, Google®, Microsoft® environments
- Ad insertion (SCTE35) support

BENEFITS

- Produce pristine video quality over the lowest bitrates
- Simultaneous synchronized outputs
- All-in-one solution increasing operational efficiencies of IP-based workflows
- Proven interoperability with Origin Servers and Content Delivery Networks
- Convergence with file-based workflows
- Future proof solution (software-based allowing features update)

ateme

Keep content looking great wherever it's played

VIDEO PROCESSING

Video Encoding

H.264 Baseline/Main/High Profile
MPEG-2 Simple/Main/4:2:2 Profile

Resolutions/Frame Rates

Resolutions: From 176x144 up to 1920x1080
Frame rates: 1 to 60 fps
Still picture mode support
Video resolution pass-through

Video Processing

Fixed/variable GOP size
Automatic I frame insertion
Automatic scene cut detection
CBR, VBR and Capped VBR
Linear and nonlinear spatial filtering
Logo insertion
Dynamic Aspect Ratio pass-through support

Video preprocessing/editing

De-interlacing/Denoising filtering
Image cropping/resizing
3:2 pulldown/Inverse telecine
Frame rate conversion/decimation

Encoding bit rate

16 Kbps to 10 Mbps per channel

Data/Subtitling/Closed Captioning

CC: SCTE 20, ATSC (CEA 608, CEA 708), NA DBS Line 21,
Divicom
DVB Subtitles
DVB Teletext
Digicipher II (conversion to DVB Subtitles)
SCTE35 pass-through

AUDIO PROCESSING

Compression formats

MPEG-1 Layer II
AAC-LC, AAC-HEV1, AAC-HEV2
Sampling frequency: 32, 44.1, 48 KHz
Dolby® Digital, Dolby® Digital Plus

Audio preprocessing/editing

5.1 to stereo downmix

INPUT/OUTPUT SPECIFICATION

Input protocol

Video: MPEG-2/MPEG-4
Audio: MPEG-1 Layer II, AAC, AC3
Transport: MPEG-2 TS (SPTS/MPTS)

Streaming

MPEG-2 TS
IGMPv3 (SSM input & output)
RTMP

Adaptive streaming

Apple® HTTP Live Streaming
Microsoft® Smooth Streaming (fragmented MP4 PIFF format)
Manifest files/Variant playlists creation

Transport protocol

RTP/UDP streaming
FTP
HTTP chunk transmission (PUT or POST)

DRM

Interface Verimatrix® & Conax® DRM servers
Apple® HLS content protection
Microsoft® PlayReady



Rearview of TITAN Chassis

CONFIGURATION / MANAGEMENT

Blades

Up to 18 hot plug blades
Fully scalable system
Built-in redundancy management
Built-in supervision

Power Supply

4 hot-plug PSUs (92% efficiency)
3+1 Redundancy

Ethernet Output Interfaces

2 redundant Ethernet switches with 2x3 independent Gigabit
Ethernet ports (up to 10Gbits) for data traffic
and/or management
Network full configuration (VLAN, spanning tree)

System Management

Web-based user's interface
N+M redundancy
Logs & alarms events
SNMP SW & HW supervision
SNMP traps
Automatic load balancing
Premium channels management

PHYSICAL

Dimensions 19" 7-RU: 482x311x740mm / 19"x12.25"x29.1"
Weight (net) 42 kg / 92.5 lbs
Weight (fully loaded) 126 kg / 277.7 lbs

ENVIRONMENTAL

Cooling Air flow from front to rear
Operating Temperature 5 to 40 °C / +41 to +104 °F
Storage Temperature -20 to 70 °C / +32 to +158 °F
Operating humidity 5 to 90% (non condensing)
Input voltage 220VAC, 50/60 Hz
Power consumption (per blade): 300W (450W at peak)
Electrical compliance and safety CE (UL, FCC, RoHS)

