

(сотргітато)

# Live Transcoder

Video encoding and transcoding on-premise and in the cloud







Datasheet

## (comprimato)

## Live Transcoder

Video encoding and transcoding on-premises and in the cloud

Live Transcoder is an eco-friendly, **GPU-powered software for video encoding and transcoding**. With the world's fastest JPEG2000 codec, it seamlessly transcodes between **production formats like JPEG-XS TR-07**, **JPEG2000 TR-01**, **NDI**, **and distribution formats such as AVC and HEVC**. Additionally, it offers motion-compensated frame rate conversion.

Deploy Live Transcoder as a docker container on-premises or in the cloud. **Ideal for events like sports tournaments or festivals**, this pay-as-you-go solution leverages Nvidia GPUs and cloud technology for cost-efficient streaming, **superior performance**, **scalability**, and **reduced carbon footprint**.



## JPEG-XS & JPEG2000 TRANSCODING

The world's fastest JPEG2000 TR-01 & JPEG-XS TR-07 engines are directly compatible with contribution streams and allows for **direct contribution to distribution transcoding**.



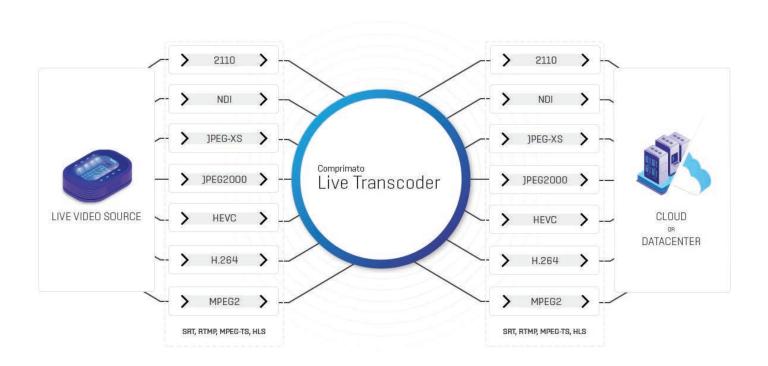
## REAL-TIME FRAMERATE CONVERSION

Ingest compressed live IP video formats, such as H.264, JPEG2000 TR-01, JPEG-XS TR-07, or NDI, and convert between 50 fps and 59.94 fps frame rate standards.



## VERSATILE DEPLOYMENT & PRICING

Deploy Live Transcoder on-premises, in the cloud as a docker container, or mix. Choose Pay as you go, monthly, or annual subscription models and meet your current streaming needs.



## Additional features

#### High Value Transcoding



## Low latency

Experience end-to-end live video transport with ultra-low latency.



## ☐ High bitrate formats

Native support for high bitrate production contribution formats including JPEG2000, JPEG-XS and NDI



## 🕮 Multichannel synchronous streaming

Effortlessly transport multiple camera feeds from a venue to a studio or the cloud in a synchronized manner using Live Transcoder.



## Motion Compensated Conversion

The state-of-the-art, motion compensated algorithm enables spotless and seamless visual quality for live sports streaming.



## Advanced Image processing

Perform image resizing, high-quality deinterlacing, cropping, padding, logo insertion, and color adjustments.



## 24 Adaptive Bitrate Transcoding

Seamlessly adapt live video content to meet the resolution, quality, and codec requirements of current and future devices.



## 😭 Green streaming

Reduce carbon footprint with energy-efficient streaming by leveraging GPU-powered processing and cloud technology.

Easy integration and management



## 3rd party integration

Easy insertion into existing workflows via REST API.



## Centralized control

Set up, manage and control hundreds of streams from a single console via REST API or web interface and monitor them via SNMP.

Flexible OpEx Deployment



## 📆 Easy deployment

Software only containerized solution simplifies deployment; no need for specialized support; maximum flexibility.



## 니기 Simple scalability

Extend your capacity simply by spinning new instances.

#### (comprimato)

## Specifications

Feature on product roadmap

## Video input

#### Supported codecs:

JPEG 2000 TR-01

JPEG-XS TR-07

NDI

H.264 (MPEG-4 AVC)

H.265 (HEVC)

MPEG-2

**SMPTE 2110** 

#### Color component sampling:

4:2:2 10bit/8bit

4:2:0 10bit/8bit

### Audio input

#### Codec:

Uncompressed PCM - multichannel

(SMPTE 302M-2007) AAC (ADTS / LATM)

MPEG2 Audio

Dolby-E pass through

AC-3

| E-AC-3

## Metadata

SCTE-35

Metadata pass through

Subtitles embeding into H.264 SEI messages

Closed Captions (EIA-608/708)

SMPTE 2038

Timecode insertion into SEI messages for H.264 and H.265 encodes (MISB 0604.6) supported with SDI, NDI, and TS inputs

## Video processing

#### Resizing

Automatic color component subsampling (both configured automatically based on input and

output settings)

De-Interlacing

Cropping / Padding

Color adjustments

Frame rate conversion

(Motion compensated) Logo insertion

## Containers & Protocols

UDP, RTP

MPEG-2 TS, MPTS

VSF TR-01

VSF TR-07

RTMP / RTMPS

SRT with Path Redundancy

NDI (input & output)

HLS

Hittless Merge

Hittless Switch

## Synchronization

#### Input PCR:

Configurable: global

(in separate transport stream) or local (contained in each input transport stream)

#### **Output PTS:**

Configurable: pass-through or adding offset

to input PTS

Multipipeline synchronization using single PCR stream in multiple pipelines

## Audio processing

Shufling

Volume gain

Sampling rate conversion

## Video output

Multiple output streams per each input stream, different configuration per each output stream.

#### Video codec:

H.264 (MPEG-4 AVC)

NDI

JPEG2000 TR-01

JPEG2000 TR-07

H.265 (HEVC)

MPEG-2

SMPTE 2110

#### Color component sampling:

4:2:2 10bit/8bit

4:2:0 10bit/8bit

## Audio output

#### Audio codec:

AAC (ADTS / LATM)

AC-3

Uncompressed PCM (SMPTE 302M-2007)

MPEG2 Audio

Dolby-E pass through

#### Configuration options:

Web UI, SNMP, REST API

#### **System Monitoring options:**

System webconsole, SNMP + custom OIDs