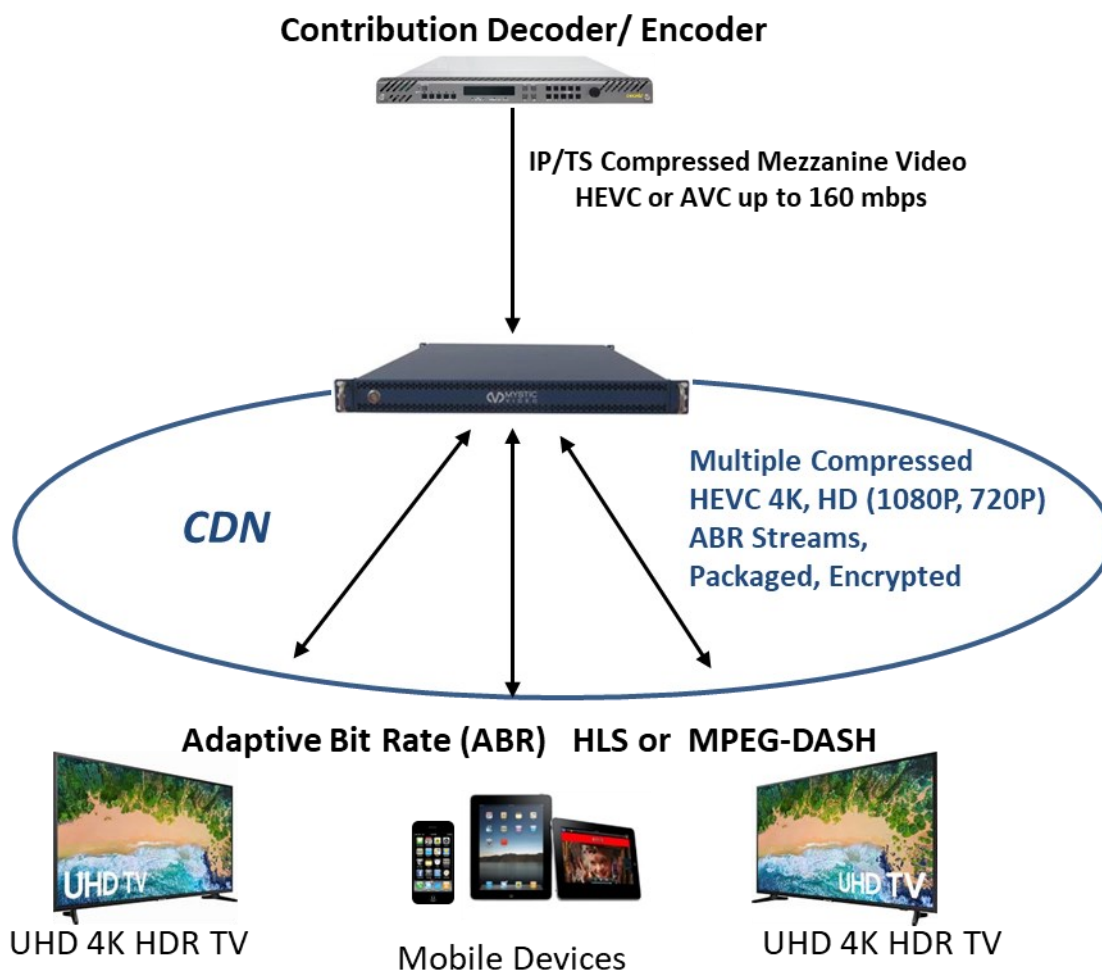# Mystic Video
# 4K, HD, HEVC/H.265, AVC/H.264
# ABR Distribution Transcoder

Mystic Video's Distribution platform provide the highest video quality compression available for AVC H.264 and HEVC H.265. It provides all features needed to deliver video of 4K and HD resolutions to the edge with transcoding, packaging, encrypting and streaming capabilities.



The platform supports transcoding of mezzanine video feeds of up to 100 mbps each into multiple HD and 4K resolutions compressed with HEVC/H.265 or AVC/H.264

Customers can rate shape and further compress video feeds as well as create addtional output resolution sizes and prepare video into various packages of Adaptive Bit Rate (ABR) streams for delivery to its subscribers.

Mystic's Video's HEVC and AVC Transcoders provide real time transcoding and support High Dynamic Range (HDR), 10 bit encoding, SEI user data handling features and High Frame Rates.

The Mystic Video System provides video and audio mux and demux features to ingest MPTS and SPTS video, separate audio and video program IDs for further individual transcoding processing. Supports Dolby Digital decode and encoding as well as High Efficiency AAC audio codecs, which are both widely deployed by   programmers and in OTT applications.

Optional Origin Server software provides all features needed to prepare HLS and MPEG-DASH packaging, encrypting video on the fly, caching and serving video to CDNs and individual user applications.

**Mystic Transcoder Cards:**
- One 4K 3840x2160P60 transrated or transcode per card, up to 4 per server
- One to Four Transcoder Accelerator Cards per server
- Up to four HD inputs and Transcoded Outputs each with up to 4 ABR profiles per card
- Up to 8 SD progressive inputs and Transcoded Outputs each with up to 5 ABR profiles per card

**Transcode/Transrate Densities per server:**
- Four 4K 3840x2160P60 transrated or transcoded
- Up to 16 HD with 64 ABR transcoded profiles
- Up 32 SD with 160 ABR transcoded profiles

**Video Transcoding:**
- MPEG2 ► Single or MultiRes/ABR AVC/H.264 and HEVC/H.265
- AVC/H.264► Single or MultiRes/ABR AVC/H.264 an d HEVC/H.265
- HEVC/H.265 8 bit and 10 bit ► Single or MultiRes/ABR AVC/H.265 and HEVC/H.265
- Down scaling 4K, HD ► HD, SD, PIP, Multiple Adaptive Bit Rate resolutions
- Input Bit rate per Video: 80-100 Mbps ► 64 Kbps; CBR, VBR, Capped VBR
- Motion Adaptive HW Deinterlacing
- HDR, 10 bit encoding and SEI user data handling
- MPTS to SPTS

**Audio Transcoding:**
- AAC, AC3, AC3-E ► LC-AAC, HE-AAC, AC3-E, and pass-through audio

**Optional Origin Server license:**
- Packaging HLS, MPEG-DASH, HDS, SS
- Encrypting on-the-fly with supported DRMs
- CDN Cache

**Input:**
- IP Multicast MPEG2-TS
- Up to 100 Mbps AVC/HEVC TS input
- Up to 160 Mbps AVC/HEVC input with ES mode
- Up to 80 Mbps MPEG-2 TS Input

**Output:**
- MPEG-2 TS UDP unicast and multicast,
- HTTP Streaming (HLS, SS, HDS, MPEG-DASH) (with Origin software option)

**Network Interfaces:**
- 4x GbE
- 2x 10 GbE & 2x 10Gb SFP+  (Optional )

**Power:**
- 10W per HD transcode, 40W Per 4K UHD
- 160W  Total per Server

**About Mystic Video**
The Mystic Video team is comprised of veteran broadcast industry leaders whose products power many major Broadcast Operators' systems. Their experience in digital video encoding and real-time system design produces solutions with the highest video quality, transcoding performance, and 24/7 operation.