

## UHD-Decode

### Ultra HD Professional HEVC Decoder for Live Broadcast and IPTV

UHD-Decode is an easy to operate and high-performance Ultra HD HEVC decoder for professional Broadcast applications such as for satellite, terrestrial, cable, OTT operators and IPTV networks, plus any kind of lab and field test experimentation.

UHD-Decode supports HEVC Main and Main 10 encoded transport stream input over IP. Video and embedded audio channels are output over quad 3G-SDI links, or HDMI 2.0 with HDR metadata.

This software-based decoder can be used in any live conditions either for Ultra HD migration validation, or long test runs, sport events contribution and for various 24/7 broadcast monitoring applications. High bit rate HEVC stream and Dolby™ AC-4 audio are supported.

**Redundant TSolP inputs**  
Up to 120 - 160 Mbps and 4:2:2 / HDR

**Professional SDI outputs or HDMI 2.0b**  
HRD > SDR Tone Mapping

#### FEATURES

##### Inputs

- Multicast or Unicast TSolP on dual redundant GbE ports (with manual failover / failback), SPTS or PID-filtered MPTS
- UDP or RTP auto detection, with FEC CoP 3 support
- Automatic input format detection (resolution, fps, HDR)
- ETR 290 level 1 Transport Stream input error monitoring
- Genlock (bi-level or tri-level support)

##### Video stream / Codec support

- Up to Ultra HD (3840 x 2160) video resolution
  - HEVC/H.265, Main and Main 10 profiles, level 5.1
  - Bit rate up to 120 Mbps (GOP) or 160 Mbps (Intra)
  - AVC/H.264, Main and High profiles, level 5.2 / MPEG-2
- 23.98 fps to 60 fps, with possible frame rate conversion
- 4:2:0 / 4:2:2 chroma sampling. 8-bit / 10-bit color depth
- HDR10-PQ and HLG decoding with automatic metadata or manual HDR signalization
- **UHD HDR > HD SDR** tone mapping for monitoring

##### Audio stream / Codec support

- AAC, HE-AAC (v1 and v2), MPEG-1 Layer II decoding
- Up to 16 embedded PCM 24-bit / 48 KHz audio channels  
Or Dolby™ AC-3/E-AC3/ATMOS/**AC-4** bitstream pass-through
- Dolby™ AC-3 / E-AC3 decode over SDI and HDMI [option]

##### Video output scaling: 2160p, 1080p, 1080i, 1080psf, 720p

- Quad 3G-SDI / QFHD (SMPTE 425-5) or 2-SI pixels, Level A and Level B, and/or 12G-SDI + HDMI 2.0b [option]
- CC 608 / CC 708 pass-through or burnt into video
- DVB subtitles and teletext burnt into video

#### CHASSIS

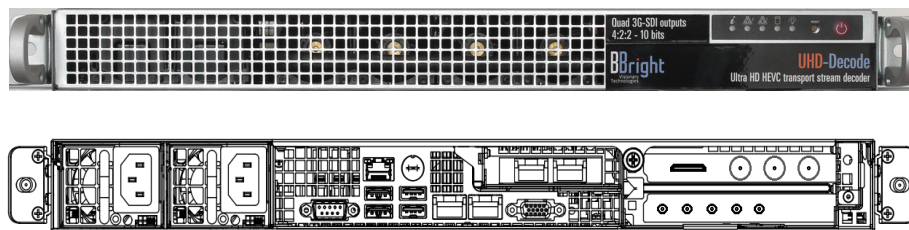
- 1RU chassis
- Carrier-grade built quality and reliability for broadcast
- Redundant power supplies (hot swappable), 100-240 VAC, 50-60Hz, 400W max. [150 - 250W typical usage]
- Four 1Gb Ethernet ports;
  - Two independent ports for Control 1 / 2
  - Two independent or redundant TSolP inputs for Data In 1 / 2
- Front-to-rear air flow
- Dimensions, W: 437 mm, D: 430 mm, H: 43 mm (1RU)
- Weight, 8.2 kg

#### CONTROL

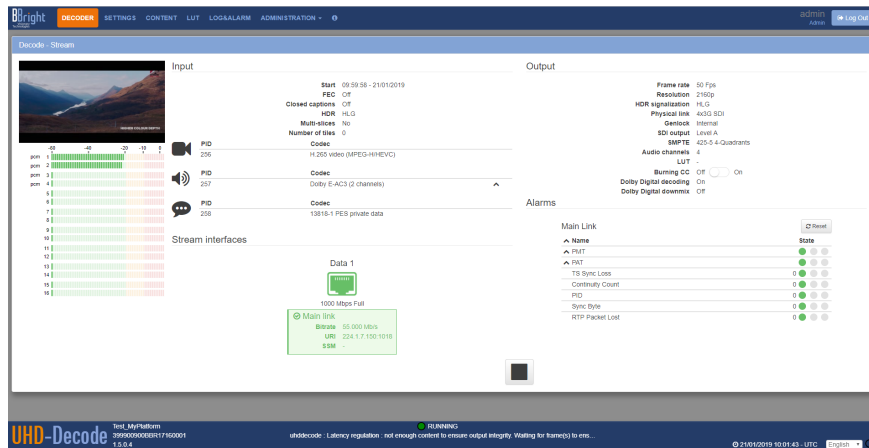
- Intuitive Web-based G.U.I.
  - Alarms and logs
  - Firmware and license updates
  - Decoder presets
  - Incoming stream monitoring with video thumbnail, audio (pass-through or decoded) bar graphs and HDR, tiles, slices information
- RESET and POWER front buttons with five status LED's
- REST API available
- SNMP v2c (on request)

# UHD-Decode / Contribution and Monitoring solution

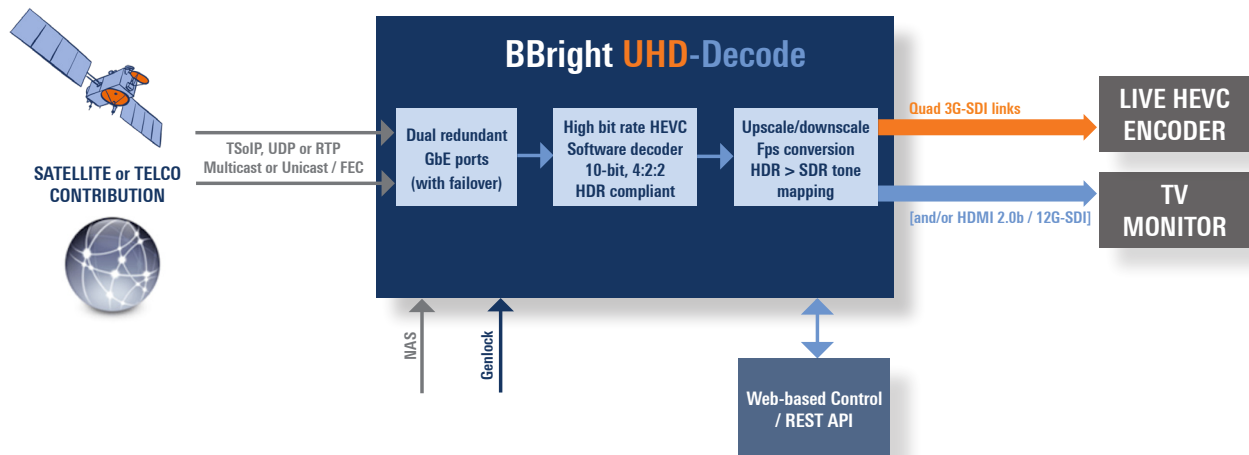
## FRONT and REAR PANEL LAYOUT



## CHANNEL MONITORING on GUI



## APPLICATION DIAGRAM



## HARDWARE CONFIGURATION and OPTIONS

### System

- Software-based decoder, with LINUX OS on two 1 TB HDD
- Stream inputs and file decoding (from internal storage or NAS)

### Options

- 12G-SDI + HDMI 2.0b output board [option] (can replace or complement the quad 3G-SDI output board)
- Dolby™ AC-3 / EAC-3 decoder and down mix
- Dolby™ AC-4 audio decoding (on roadmap)

## ORDERING INFORMATION and AVAILABILITY

- Part number: **UHD-Decode**
- Part number: **12G + HDMI outputs [option]**
- Part number: **Dolby™ Digital / Digital+ decoding [option]**

### Ultra HD decoder is available for shipment

Please contact sales for ordering details relative to product configurations or other requested option

January 2019, rev. 0.85. Product specifications are subject to changes without notice and are not contractual