

# Transcoder



Our Transcoder has got a new re-design with more powerful hard- and Software in 2023

- Video compliant compliant with h.265/HEVC Baseline, Main Profile@L6.2 or less, h.264/AVC Baseline, Main & High Profile@L5.1 or less
- Audio compliant with MPEG-1 Layer II Audio, **MPEG-4**, AAC transcoding, AC3 passthrough or encoding to stereo-lipsync
- Resolution from 96x96 to 4096x2160
- Bitrate from 200 kbps to 20 Mbps
- H.265/HEVC support 4Kx1 / 1080Px8 / 720Px16 / SDx32
- up to 16xHD(1080p30)/32xSD(576p25) H.264/AVC transcoding
- up to 1x4K(2160P 60) /2x4K(2160p30) / 8xHD(1080p30) /32xSD(576p25) H.265/HEVC transcoding
- Now: **MPEG2 support**
- Support local video transcoding and delivery
- Rolling subtitle insert
- Logo and Text insertion
- Multi-audio transcoding and pass through
- PCR self-correcting
- PSI/SI edition and PID passthrough
- Up to 200 MPTS/SPTS output, 100 Mbps for each
- Support 1+N output stream backup feature
- Remote control by Web-Interface
- Re-Multiplexing DVB and IPTV conform
- Subtitle passing and EIT remultiplexing (MPTS->MPTS)
- chrominance sampling YUV 4:2:0, YUV 4:4:4 decoding and encoding
- Multi-audio transcoding and pass through, supports audio ALC
- Support real-time monitoring of input streams and three-level error detection based on TR101290 standard, PSI/SI information checking
- input analysis such as encoding format, aspect ratio, resolution, etc.

## 5th Generation BLANKOM® IPTV Headend Technology

Broadcast grade, high performance transcoder for up to 32 SD or 16 HD or 1 4K UHD channels. (Ex.: 30 HD to HD reducing bitrates by keeping format and codecs are also possible) BTR-6000 can process SD/HD efficiently based on the high-performance processing chip, is designed specifically for IPTV systems with HEVC/H.265 low bit rate compression.

The channels can be converted to a low bit rate (<600kbps, D1) while maintaining picture quality. It also supports IP re-multiplexing MPTS and SPTS streams.

The multiple Video resolution functions can be perfectly used for multi-screen (TVs, Smart phones, tablets, PCs, etc). The friendly network management interface can help configuring and monitoring the working status easily.

*Up to 32 channel SD or*

*16 channel HD or*

*1 channel 4K UHD HEVC*

*Multiscreen Transcoder with Multiplexer*

## TECHNICAL SPECIFICATIONS

### INPUT

- Interface: 3...4x 1000M/100M/10M RJ45, Full Duplex
- TS/IP Input Bit Rate: 800Mbps per RJ45
- Data Protocol: UDP, ICMP, IGMP V1, V2, V3, RTP, HTTP, RTSP, FTP, RTMP, HLS (HTTP Live Streaming)
- Transcoder source: IP inputs, Local files
- IP Protocol: Unicast, Multicast
- USB – file insertion and playback – streaming for Info-channels

### INPUT VIDEO/AUDIO FORMAT

- Video: H.265/HEVC, H.264/AVC, MPEG-2, MPEG-4
- Audio: MPEG-1L2, MPEG-4, AAC, ... EAC3, DD+ passthrough possible
- Optional HDMI and/or SDI input modules (future releases)

### RE-MULTIPLEX

- Input: SPTS / MPTS
- Null package process: Null packet pass through, insert and filtering
- TS Editing: Service editing, PSI/SI editing, PID pass through / remapping, PCR auto-correction
- Maximum bitrate: 100Mbps each
- Maximum TS count: 200 input TS Streams + 200 output TS Streams (with transcoder function disable)

### OUTPUT

- Interface: 3...4x 1000M/100M/10M RJ45, Full Duplex
- TS/IP Input Bit Rate: 800Mbps per RJ4
- Data Protocol: UDP, RTMP, HLS, FTP, RTP (for MUX only)
- IP addressing: Unicast, Multicast
- Type: IP Streaming, DVB conform remuxed streams

### VIDEO/AUDIO FORMAT FOR ENCODING

- Video Format: HEVC (h.265) h.264, MPEG2
- Audio Format: MPEG-1 Layer 2, MPEG-2 AAC, MPEG-4 AAC
- Package Format: MPEG-TS
- Bitrate Control: VBR, CBR
- Video resolution: 4096x2160, 3840x2160, 2560x1440, 1920x1080, 1280x720, 720x576, 720x480, 704x576, 704x288, 640x480, 544x576, 544x480, 480x576, 480x320, 480x270, 360x320, 352x576, 352x288, 320x240, 320x200, 240x160, 192x192, 192x128, 176x144, 128x96, 96x96, ...
- Video Aspect Ratio: Auto, 4:3, 16:9
- Video frame rate: Auto, 30 fps, 29.97 fps, 25 fps, 24 fps, 23.97 fps
- Video bitrate: 200 kbps ~ 20 Mbps
- Audio sampling rate: 32 kHz, 44.1 kHz, 48 kHz
- Audio bit rate: 32 kbps, 64 kbps, 96 kbps, 128 kbps, 192 kbps, 256 kbps, 384 kbps

### CONTROL & MONITORING

- Interface: 1x RJ45, 1000M/100M
- Protocol: HTTP Web GUI

### GENERAL

- Dimensions: 430 mm x 335 mm x 44 mm, 19" 1RU
- Approx weight: 8,7 kg
- Power: AC 110V...240V, 6A, 47...63 Hz
- Power consumption: 350W max.
- Temperature: 5...45 °C (operation), -10...65 °C (storage)

**Ordering Guide:** BTR-6000V IPTV Transcoder  
**Companion product:** BTR-600VX broadcast grade Transcoder

