

Anystream428

200* IP/IP H.265 IPTV Transcoder



Anystream428 is a high video quality, high density compression perfect carrier-grade video processing solution, most OTT (over the top), Cable, DTH, Terrestrial, IPTV services will transition MPEG-2 or H.264/AVC to HEVC to deliver content to Huge Number of Users while Dibsys will take advantage of the standard's improved quality and lower bitrate to deliver better image resolutions. Dibsys's HEVC transcoder revolution video coding by using only half bitrates of H.264/AVC for the same quality of video service. Therefore, it helps many video service providers to save massive bandwidth and storage cost which won't limit the development.

It is a real-time multi-channel/format transcoder, which can support 25*SD or 12*720p or 5*FullHD (per Blade), Up to 8 Blades 200 streams Simultaneously. With the support for various encapsulation formats base on UDP, RTP/RTSP, Pull/Push HTTP, RTMP, HLS protocols, Anystream428 combined result of 1080p pixel density, 30 fps motion fluency, In-deep Deblocking Filter, I B P Slices and 8-bit sample depth is an unmatched viewing experience in 4:2:0 Chroma Format.

Depending on the configuration Of Cable TV headend platform, it forwards selected programs via IP datacasting; PAT, PMT, video PID, audio PID(s) and PCR PID are transmitted. It selects all required PIDs and multiplexes the demultiplexed transport stream packets into IP packets. Anystream428 is suitable for DVB front end MPEG-IP platform, Cable TV operator/Owner to launch IPTV/OTT new market business. With the increasing popularity of Cable hybrid STB and OTT/IPTV android box, HEVC cost advantages have become increasingly apparent, Anystream428 help the operators transit MPEG-S/AVC to HEVC video solution directly. With this solution, it is easier to transmit the video to more users with less investment.

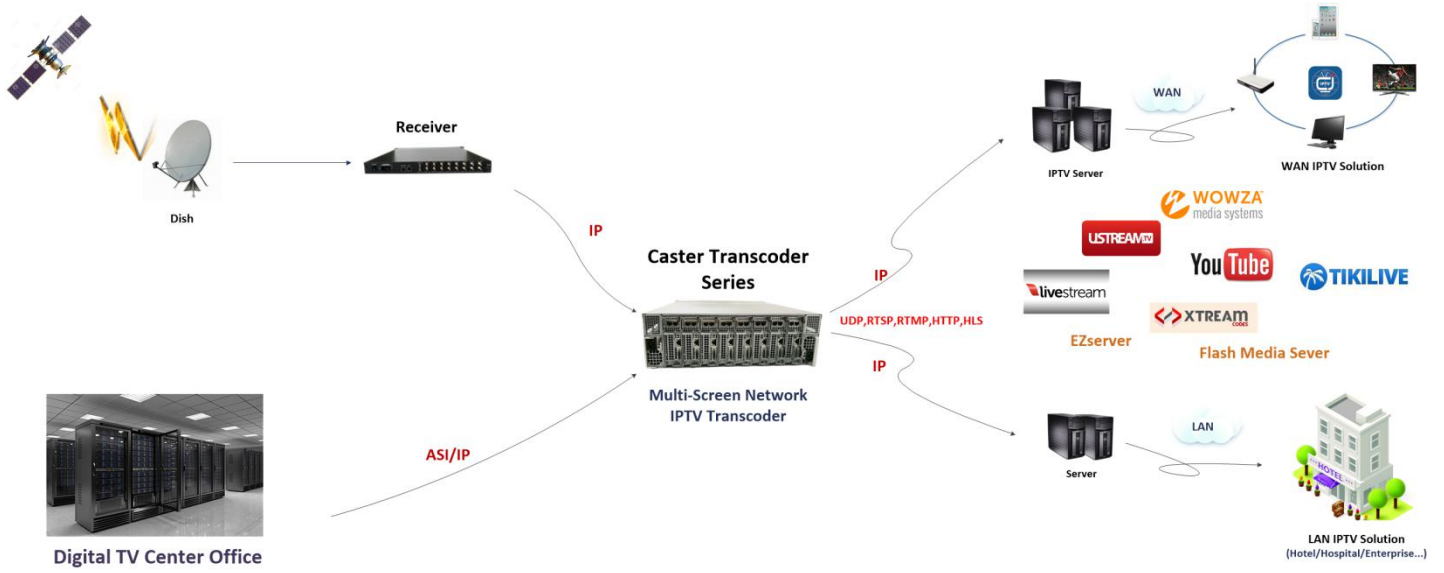
Features

- Telco Quality, Highly Reliable, High density 3-RU platform can process up to 200*SD, 96*720P, 48*1080P Full HD(1080P), 16*4K profiles
- Achieve a compression gain of 40-60% over H.264/AVC in subjective quality, optimized for 800 Kbps for SD 1.5Mbps for HD 720p,3Mbps for HD 1080p
- Creates simultaneous High,Medium, and Low bitrate streams (profiles) of MultiScreen IPTV application
- H.265/HEVC Main Profiles Level 5.1
- Baseline, main profile & high profile with variable GOP
- Picture-in-picture (PIP) operation supported
- HD-to-SD down, SD-to-HD up conversion
- GbE IP outputs –UDP, RTSP, RTMP,Pull/Push HTTP, HTTP Live Smooth(HLS), FTP M3u8 playlist files
- Flexible GOP structures with Reference-frame and B-frame edit
- Frame rate down- and up-conversion
- High quality pre-processing including filtering, Deinterlacing, cross scaling,De-Block Filter
- Support for Variable Bit Rate (VBR) encoding maximizes adaptive streaming video quality and bandwidth efficiency
- PCR correction to accurately correct several PCR of input data
- Based on embedded Ubuntu Linux via flashdisk
- DVB and Subtitles can be included in transcoded streams (burned-in), offers subtitles with 100% compatibility with all existing device
- Logo insertion and Image cropping/resizing
- High contrast LCD display
- Parameter template settings and imports
- Real time preview of input video stream in encoding and parameter configuration
- The preview interface adds color control adjustment (CCATM) function (video output brightness, contrast, saturation, aberration).
- TS parameter configuration: The output stream can be edited to change the program number, program name, supplier (for video output part), easy to identify end device.
- Low power consumption and high reliability with MTBF(Mean Time Between Failure) \geq 87600 Hours
- Real-time dynamic monitoring of each transcoding channel operation
- Easy configuration via Web GUI
- Designed for secure 24*7*365 operation
- Dual hot-swappable power supply

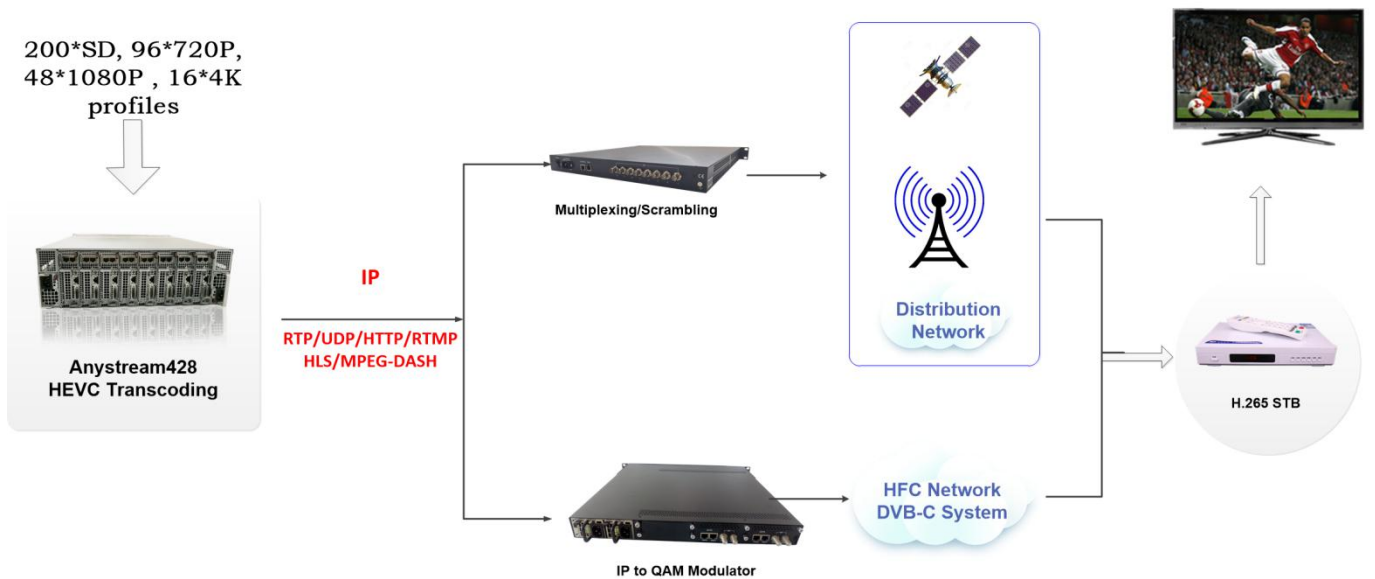
Main Application

- Distribute Lowest bitrate HD Video to Ethernet
- Bandwidth reduction for Internet/OTT streaming and wireless networks
- IPTV live stream transcoding
- Transcoding for multi-screens and devices for set-top boxes, tablets, mobile phones
- Small/Middle-Scale Headends for Multiple System Operators
- Upgrade H.264 to HEVC Video headend solutions
- VOD archives from live streams

For IPTV Solution



For DVB Solution



TECHNICAL SPECIFICATIONS

Inputs and Outputs

Connector	Two Gig Ethernet Ports per blade, Up to 8 hot plug blades RJ45 100/1000M - Auto Negot MPEG-TS(MPTS or SPTS) Over IP input MPEG-2 TS (SPTS) Over IP out TS Over UDP/RTP/HTTP RTP over HTTP FLV Over HTTP RTMP MP3 over HTTP FLV ASP HTTP Live streaming Apple HLS (m3u8)
-----------	---

Pre-processing

LOGO insertion	
Subtitle Overlay	Option Static or roll subtitle, up to 3 way
Deinterlace	default, Close, Linear, Blend, Bob, Yadif
PID Configuration	PMT/Video/Audio PID; PCR delay/disp interval
Advanced Processing	In-loop De-blocking filter Scene detection, CABAC, CAVLC Entropy coding Automatic PicAFF, MBAFF Interlaced coding Automatic Flexible Macroblock Ordering(ASO) and Arbitrary Slice Ordering(ASO) in Baseline profile Flexible Macroblock Ordering(FMO) and Arbitrary Slice Ordering(ASO) in Baseline Profile 8x8 vs. 4x4 Transform Adaptivity in High profile Quantization Scaling Matrices in High profile I,B and P Slices, Multiple Reference Frames

Video Processing

Bitrate Control	VBR,CBR,ABR, NearCBR
Frame rate	2-30fps
Screen Ratio	4:3, 16:9
Option	Multiple concurrent outputs per each encoding input
Video codec	H.265/ HEVC Main profile Level 4.1&5.1 H.264 Main/High Profile 3.0- 5.1 H.264 Baseline Levels 1, 2, 3 H.263 Profile Levels 10, 20, 30 MPEG-4 SP, Levels 0, 0b, 1, 2, 3
Encoding delay	1000-1500ms
B-Frame	0-5
Reference Frame	1-6
Key frame rate	1-18
Video Bitrate	32kbps to 10Mbps
Video Delay	0-1000ms
Scale	Ordinary, Auto Padding intelligent Scale
Fast Mode	Quality Priority, Balanced, Speed Priority

MPEG-2 Input	H.265 Output	Max.Channels
SD/480i inputs @4 Mbps	SD @800kbps, 480p	25
720p inputs @10 Mbps	720p @2Mbps	12
1080i/p inputs @18 Mbps	1080p @ 4Mbps	5-6
4k/H.264 @20Mbps	4k @ 12Mbps	1-2

Resolution	3840x2160p(UHD) 1920x1080p, 1280x720p 720x576p, 720x480p, 640x480p, 480x360p, Configurable
------------	---

Audio Processing

Numbers of encoding	2 audio Channels per one video source (Provides up to 8 audio channels for customization)
Audio encoding	AAC, AACv2, AMR Dolby Digital(AC-3) Dolby Digital Plus(EAC-3) MP2A, MP3A, Transparent
Audio Channel	Single, Dual, 5.1 Channel
Audio Track	0, 1, 2, 3
AV Sync	0s, 0.5s, 1s, 3s, 4s, 5s, 6s
Sample rate	8khz to 48khz
Bitrate rate	8kbps to 384kbps
Volume	Ordinary, Intensity1, Intensity2, Intensity3
AGC	On, Off

Management

Local interface	Power On/Off button Power LED; Blade status LED
Configuration	Web-based user's interface
Port	RJ45, 10/100/1000M Base-T
Language	English

Environment

Fans	4x 8cm Heavy duty fans with optimal cooling zone
Form Factor	3RU
Power Supply	Dual hot-swappable 1000W: 100-120V, 50-60Hz, 12-10Amp 1620W: 180-240V, 50-60Hz, 10.5-8Amp
Operation temperature	0~50°C (32 -122°F)
Storage temperature	-40-70°C (-40-158°F)
Power consumption (per blade)	1620W high-efficiency redundant
Dimensions	590mm (W) x 440mm (L) x 140mm (H)
Weight	40kg (62.2lbs)

ORDERING INFORMATION

Product category	Product Model	Detail Description	Application
Related Products	25Channel H.265 IPTV Transcoder Anystream400	2*GbE IP input/output, 25*SD or 12*HD or 5*FullHD transcoding per Chassis 1RU, UDP/RTSP/HTTP/HLS/ RTMP, H.264/H.265	-Terrestrial TV system -IPTV -Upgrade H.264 to H.265
	200Channel H.264 IPTV Transcoder Caster-t328	2*GbE IP input/output, 25*SD or 12*HD or 5*FullHD transcoder per blade, Up to 8 hot plug blades, H.264 (H.265 upgrade software license), UDP/RTSP/HTTP/HLS/RTMP	-Cable TV system -IPTV -Wowza Server RTMP
	H.264 OTT Transcoder Matrix-IV -120Ch Matrix-I -30Ch	30SD (or 15HD or 6FullHD) per module. Up to 4 modules 120Channels, H.264 encoding, 2RU chassis, UDP/RTSP/HTTP/HLS/ RTMP Ultra Low bitrate of superior video quality	-High-end Cable TV/DTH -Carrier grade IPTV/OTT -Web/Internet TV -Ultra-low bitrate at Superior video quality
Companion Products	PREMIUM 8* DVB-S2 FTA IRD IRD1218Plus	8* DVB-C or FTA/BISS DVB-S2 inputs (QPSK/8PSK/ 16APSK/ 32APSK demoduation); 14MPTS/240+SPTS/2ASIout; MPEG-TS over UDP/RTP; Multiplexer/Scrambling; 5 years Warranty	-Large and Medium Cable TV operator
	PREMIUM 8* DVB-S2 CI IRD IRD1380	8*DVB-C/S2/T2/ATSC/ISDBT/8 CI input. 9 MPTS/128SPTS/9ASI out; MPEG-TS over UDP/RTP; Multiplexer; 5 Years Warranty	-IPTV/OTT headend -Content providers
	8ASI/450IP ->120IP Multiplexer DCM701	8ASI/450 IP inputs, Multiplex to 120 SPTS or MPTS IP out, MPEG-TS over UDP/RTP out	-DTH -Carrier-grade
	16 HDMI H.264/H.265 IPTV Encoder Magicbox-HD416S	1*HDMI inputs/1GbE Port per board, Up to 16 boards per 3RU Chassis, H264/H.265 Encoding, HTTP/RTSP/RTMP/HLS/UDP out. 3x3 bitrate/resolution/Profile Over IP out and plus 1* HLS out	-Low cost IPTV/OTT - Multi-Bitrate, Res, Protocol -Both H.264/H.265 video over Ethernet/ LAN -Hotel, Campus -Breakthrough Price !
	Carrier-grade IP QAM modulator IPQ6250	16 QAM no-adjacent/Two GbE IP per Module, 3 Modules 48QAM per 1RU, AnnexA/B/C,Multiplexer/Scrambling; 5 YearS Warranty	-Cable TV operator -Distribute video to QAM Network