

Caster-T322

DIBSYS

25* IP/IP H.264 IPTV Transcoder



Caster-T322 answers all market requirements and is thus the suitable solution to Terrestrial, Satellite, Cable, IPTV networks. It is a real-time multi-channel/format transcoder can support 25*SD or 12*720p or 8*FullHD streams Simultaneously. It converts HD/SD streams to any H.264 or MPEG-2 format, bitrate and resolution. With the support for various encapsulation formats base on UDP, RTP/ RTSP, Pull/Push HTTP, RTMP, HLS protocols. The product can be configured to transcode up to 25 PIDs of H.264 video in a 1RU form factor, along with up to two audio PIDs per video PID. The hardware can be configured and licensed to upgrade H.264 to H.265/HEVC transcoding, easy for HEVC/H.265 video transcoding applications, reduce bandwidth usage, and save equipment costs.

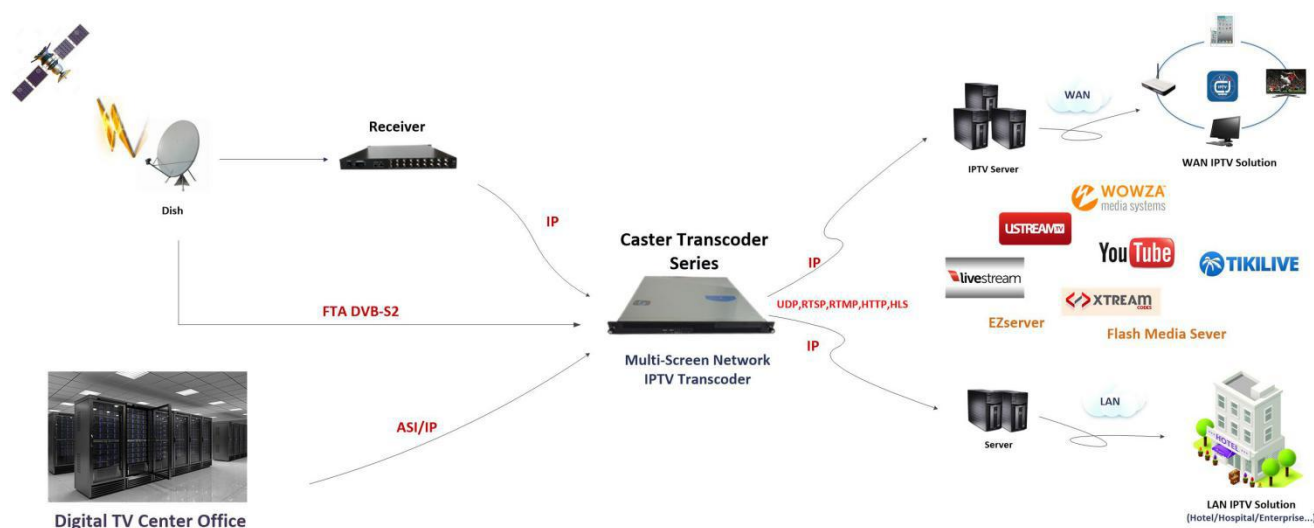
Additional options for stream adaptation, such as deinterlacing, video scaling, frame rate conversion, and audio volume and sample rate conversion allow for serving set-top boxes, tablets, mobile phones and others.

Features

- High density 1-RU platform can transcode up to 25*SD or 12*720p or 8*Full HD profiles
- Creates simultaneous High,Medium, and Low bitrate streams (profiles) of MultiScreen IPTV application
- Optional H.265 transcodes by software licensed
- Baseline, main profile & high profile with variable GOP
- Multiple Codec, Protocol, Bitrate ,Resolution, Profile per channel
- Compatible with external MPEG-DASH packager for OTT delivery (option)
- Picture-in-picture (PIP) operation supported
- HD-to-SD down, SD-to-HD up conversion
- GbE IP outputs – RTMP, HTTP Live Streaming and HLS encrypted function, Pull/Push HTTP/RTSP, RTMP, UDP, SDP, SRT protocol
- 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, image insertion
- Based on embedded Ubuntu Linux via flashdisk
- 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.
- DVB Subtitle and Logo insertion
- High contrast LCD display
- Parameter template settings and imports
- Real time preview of input video stream in encoding and parameter configuration
- Support multiple devices unified management
- Easy configuration via Web GUI
- Designed for secure 24*365 operation

Main Application

- Distribute HD Video to Ethernet
- Transcoding low bitrate in limited bandwidth of Ethernet for Cable TV operator
- IPTV live stream transcoding
- Transcoding for multi-screens and devices
- Small/Middle-Scale Headends for Multiple System Operators



TECHNICAL SPECIFICATIONS

Inputs and Outputs

Two Gig Ethernet Ports,
 Connector Type RJ45 100/1000M - Auto Negot
 MPEG-TS(MPTS or SPTS) Over IP input
 MPEG-TS (SPTS) Over IP out
 TS Over UDP/RTP/HTTP/SRT
 RTP over HTTP
 FLV Over HTTP
 RTMP
 MP3 over HTTP
 FLV
 ASP
 HTTP Live streaming / HLS encrypted

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 De-blocking filter, Scene detection,
 Automatic MBAFF,CABAC Entropy Encoding

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.263 Profile Levels 10, 20, 30
 MPEG-4 SP, Levels 0, 0b, 1, 2, 3
 H.264 Baseline Levels 1, 2, 3
 H.264 Main/High Profile 3.0- 5.1
 Encoding delay 1000-2000ms
 B-Frame 0-5
 Reference Frame 1-6
 Key frame rate 1-18
 Video Bitrate 32kbps to 10Mbps
 Enhancement filter Deinterlacing; MABFF CABAC; Noise reduction;
 Sharpening; Visual Optimizing
 Video Delay 0-1000ms
 Scale Ordinary, Auto Padding intelligent Scale
 Fast Mode Quality Priority, Balanced, Speed Priority

MPEG-2 Input	H.264 Output	Qty
SD/480i inputs @4 Mbps	SD @2Mbps, 480i	25
720p inputs @10 Mbps	720p @4Mbps	12
1080i/p inputs @18 Mbps	1080p @ 6Mbps	8

Resolution 1920x1080p, 1280x720p, 720x576p, 720x480p, 640x480p, 480x360p, Auto

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 LCD
 Configuration Web Interface
 Port RJ45, 10/100/1000M Base-T
 Language English

Environment

Power Supply 110-240 VAC
 Operation temperature 0~50°C (32 -122°F)
 Storage temperature -40~70°C (-40-158°F)
 Power Consumption 100W
 Dimensions 483mm (W) x 534mm (L) x 45mm (H)
 Weight 11kg (24lbs)

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 transcoder 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 10*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
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 -IPTV/OTT headend
	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; 5Year Warranty	-Content providers -DTH -Carrier-grade