

Caster-T305

2/4/8*SD-SDI Video
Multiscreen IPTV Encoder



Caster-T305 high-performance standard definition solution allows content owners and service providers to significantly increase the content hours delivered while adhering to processing timetables and video quality targets in a cost-effective and scalable manner. A real-time multi-channel, codec, format IP-based encoder for multi-screen delivery (TV, Mobile, and Web). With the support for various encapsulation formats base on embedded Linux operating system appliances. It relies on an Intel 4 or more Core CPU as an accelerator.

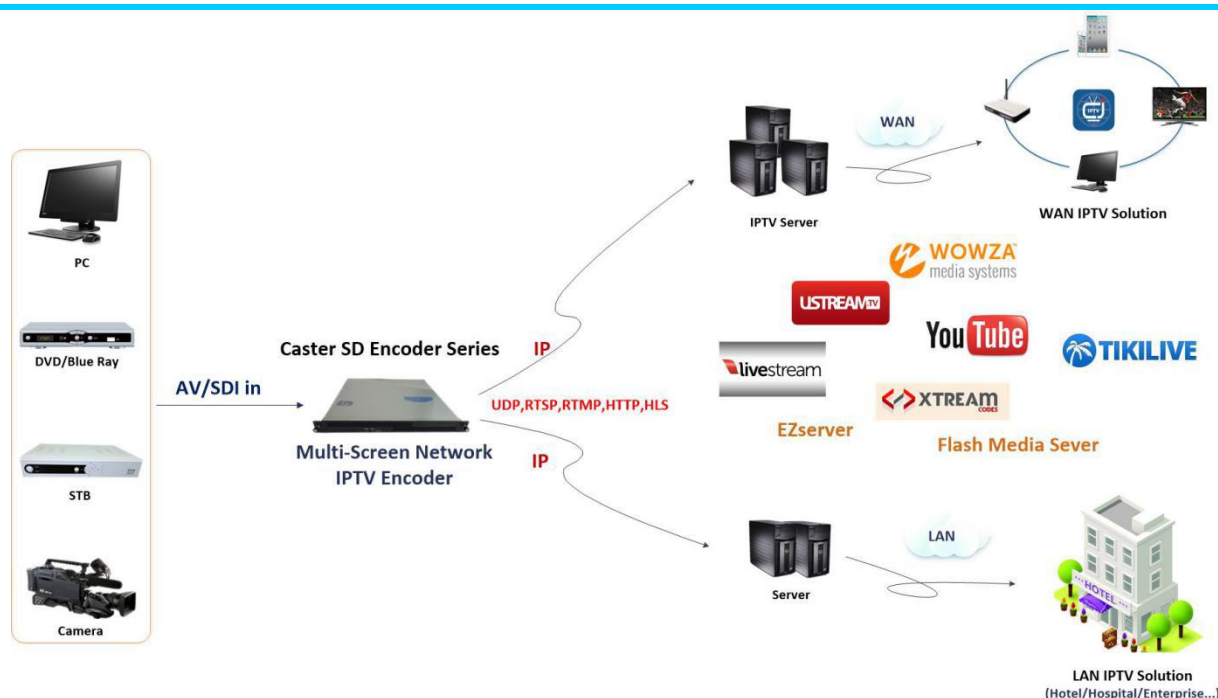
Caster-T305 can push/pull an MPEG-2, H.264, MPEG-4 encoding video streams deliver to various servers, such as Adobe Flash Server, Wowza Server, Windows Media Server, Apples HTTP Live Streaming, and some other servers base on UDP/RTSP/RTMP/HTTP/RTP/HLS protocols.

Features

- Optimized for 500 Kbps for 480i/576i, 1.5 Mbps for HD 720p, 2.5 Mbps for HD 1080i and
- 3.5 Mbps for HD 1080p.
- Up to Eight SDI per chassis, Configurable for 8 channel out by default
- Creates simultaneous High, Medium, and Low bitrate streams (profiles)
- Multiple output streams per input service to support Broadcast, VOD, IPTV and OTT, mobile/ web, Set top box applications
- SD MPEG4/H.264/MPEG-2 to any resolution encoding
- Multiple Codec, Protocol, Bitrate, Resolution, Profile per channel
- GbE IP outputs – UDP, RTSP, RTMP, HTTP, HTTP Live Smooth(HLS), FTP M3u8 playlist files
- **Picture-in-picture (PIP) operation supported**
- Audio support: AAC, MPEG, MP3 or Dolby Digital AC-3 passthrough
- High quality pre-processing including filtering, Deinterlacing, cross scaling, image insertion
- Based on embedded Ubuntu Linux
- Superior video quality at ultra-low bitrates, generally video advised SD about 500kbps for lowest bitrate
- Logo Insertion
- Selectable any resolution from QSIF to 576p
- Compatible with external MPEG-DASH packager for OTT delivery (option)
- 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.
- Supports logo insertion and text overlay on outputs
- Designed for 24*7*365 uninterrupted working
- Easy-to-Use System Management
- Web Management

Main Application

- Digital broadcast and Multi-screen headend
- IPTV, Over-the-air TV distance learning
- Mobile, Broadcast, Internet TV/Web TV
- VOD content encoding



TECHNICAL SPECIFICATIONS

Input

Baseband input: 2/4/8x SD-SDI (SMPTE-259M)

Output

IP Output type: Two Gig Ethernet Ports
 Streaming format: Mpeg-2/H.264/H.263/MPEG4 SP/MPEG4 ASP; MPEG-1 Layer II, AAC, AC3, AMR, WMA, MP3 TS Over UDP/RTP/HTTP
 3GP Over RTP FLV Over HTTP/RTMP
 HTTP Live streaming Apple HLS (m3u8)

File Output

Encoding: 3GPP/3GPP2/WMV/FLV/TS
 File output support timing and capacitive record

Pre-processing

Image setting: Video adjustments (Brightness, contrast, Saturation, Hue)
 Frame rate: from 2fps to 30fps
 Aspect ratio: 4:3 and 16:9, WSS control
 Image insertion: LOGO insertion
 Subtitle Overlay: Static or roll subtitle, up to 3 way (optional)
 PID Configuration: Depending on the configuration, it forwards selected programs via IP datacasting; PAT, PMT, video PID, audio PID(s) and PCR information are Transmitted

Video encoding

Bitrate mode: VBR, CBR
 Resolutions: 80x64, 176x120, 128x96 (4:3), 176x128, 144x80, 176x144, 144x140, 220x176, 160x90 (16:9), 40x176, 320x240, 352x288, 400x300, 480x360, 720x576, 720x480, 854x480(16:9)

Max channels per RU	Signal Input:SDI H.264 Out: SD in 1.5Mbps Channels:Up to 8 streams Notes:Take those information as reference only, For details contact us
	Up to multiple concurrent outputs per one stream Input
Video codec	H.263 Profile0, Levels 10, 20, 30 MPEG-4 SP, Levels 0, 0b, 1, 2, 3 H.264 Baseline Levels 1,1b, 2, 3 H.264 Main Profile/High Profile 3.0- 5.1 MPEG-2 MP@ML 4:2:0
GOP Size	I-Frame Time Interval; B-Frame Number; Reference Frame
Video Bitrate	32kbps to 4Mbps
Enhancement filter	Deinterlacing; MABFF CABAC; Noise reduction; Sharpening; Visual Optimizing

Audio encoding

Audio encoding: LC-AAC, HE-AAC and HE-AACv2 (including Parametric Stereo) MPEG-1 Layer, AC3, MP3
 Sample rate: 8khz to 48khz
 Data rate: 8kbps to 384kbps

Management

Interfaces: LC display, key button, WEB

Environment

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