

Caster-T315

4* HD-SDI H.264 IPTV Encoder



Caster-T315 high-performance High 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. With the support for various encapsulation formats base on embedded Linux operating system appliances.

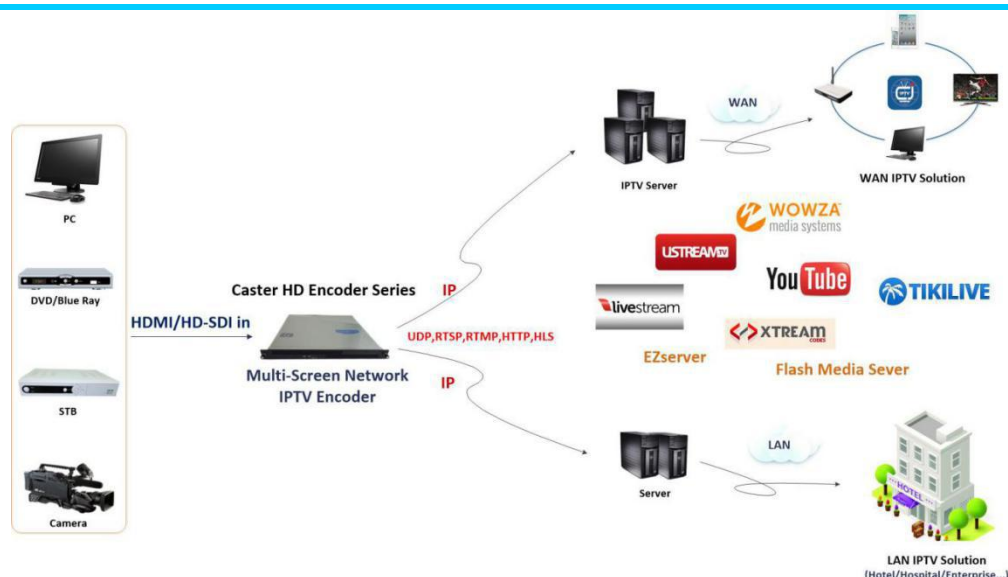
Caster-T315 can push/pull 4Channels H.264, MPEG-4 encoding video streams deliver to various servers, such as Adobe Flash Server, Wowza Server, Windows Media Server, Apples HTTP Live Streaming, and some other servers base on UDP/RTSP/RTMP/ HTTP/RTP/HLS protocols. The all HD-SDI live content delivery by enabling to repurpose content over numerous devices such as TV, tablets, PCs or web players while maintaining uncompression video quality. It is a answer for all market requirements and is a suitable solution to Terrestrial, Satellite, Cable, IPTV networks.

Main Features

- Up to 4Channels HD-SDI or HDMI per chassis(1RU)
- Highly Reliable, High density 1-RU platform can process up to 4*1080P Full HD profiles
- Optimized for 1500 Kbps for SD, 2.5 Mbps for HD 720p, 5 Mbps for HD 1080p.
- Multiple output streams per input service to support Broadcast, IPTV, Set top box applications
- Multiple Codec, Protocol, Bitrate, Resolution, Profile per channel
- GbE IP outputs –UDP, RTSP, RTMP, Pull/Push HTTP, HTTP Live Smooth(HLS), FTP M3u8 playlist files
- Picture-in-picture (PIP) operation supported
- Flexible GOP structures with Reference-frame and B-frame edit
- Broadcast-grade HD/SD up and down converter
- Frame rate down- and up-conversion
- Up to 2 audio channels Per embeded SDI inputs, Option Provides up to 8 audio channels for customization
- High quality pre-processing including filtering, Deinterlacing, cross scaling
- Support for Variable Bit Rate (VBR) encoding maximizes adaptive streaming video quality and bandwidth efficiency
- Based on embedded Ubuntu Linux
- 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
- Selectable any resolution from QSIF to 1080P
- Designed for 24*365 uninterrupted working
- Easy-to-Use System Management via Web

Main Application

- Digital broadcast and IPTV headend
- Multimedia and games, animation, video production
- Repurposing HD-SDI Video Feeds for Streaming
- Transrating for Bandwidth Reduction



TECHNICAL SPECIFICATIONS

Input

Number of Channels : 4 Ports

SD-SDI	SMPTE 259M - 270Mbit/s
HD-SDI	SMPTE 292M - 1.485Gbit/s
3G-SDI	SMPTE424M - 2.97Gbit/s
Connector	1x BNC (75 Ohm)
	HDMI 1.4a

Output

IP Output type	Two Gig Ethernet Ports,
Connector Type	RJ45 100/1000M - Auto Negot
Streaming format	MPEG-2 TS (SPTS), Over IP out TS Over UDP/RTMP/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	De-blocking filter, Scene detection, Automatic MBAFF, CABAC Entropy Encoding

Video encoding

Bitrate Control	VBR, CBR, ABR, NearCBR
Resolutions	1920x1080p, 1280x720p, 720x480p, 720x576p, 480x360p, Auto
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

Audio encoding

Numbers of encoding	2 Channels via embedded in SDI (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 + control buttons
Configuration	Web Interface
Port	RJ45, 10/100/1000M BaseT
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)

Product Information

Models	Description
Caster-T310	4Channels HDMI (Without HDCP) Inputs
Caster-T315	4Channels SD/HD-SDI Inputs

ORDERING INFORMATION

Product category	Product Model	Detail Description	Application
Related Products	4* MPEG4 AVC Broadcast Encoder ENC3345/ENC3341	4* SD/HD-SDI or HDMI(HDCP) inputs, H.264/AVC, MPEG1 L2, AAC (option), 1080P, 1080I, 720P, 576I, 480I, 60/59.94/50fps; 4*SPTS/1*MPTS over UDP/RTP, DVB-ASI out	-DVB-C/DVB-T2/DVB-S2 -Deliver video to IP, ASI -TV Studio Station
	4*MPEG2/AVC Broadcast FullHD Encoder ENC3445/ENC3441	4* SD/HD-SDI or HDMI(HDCP) inputs, MPEG2/H.264, MPEG1 L2, AAC, AC3 (option), 1080P, 1080I, 720P, 576I, 480I, 60/59.94/50fps; 4*SPTS/1*MPTS over UDP/ RTP, DVB-ASI out; Close Caption, Low latency	-DVB-C/ATSC -Low latency encoding -MPEG-2 HD
	4* HDSDI HDMI H.264 H.265 IPTV Encoder ANYSTREAM315	4* HD-SDI or HDMI inputs, H.264/Hevc, AAC/AC3/AC3+/ MP2A,MP3A,,Dual audio encoding, UDP/RTSP/HTTP/HLS/RTMP	-IPTV Headend -Wireless TV system -Transrating for Bandwidth Reduction
Companion Products	4* HD-SDI H.264 IPTV Decoder Caster-R315	Two GbE IP input,2 HD-SDI Decoding in mpeg2/H.264(or H.265), Up to 30 fps at 1080p, 720p, etc	-Collect Pubic IP to HD-SDI -IPTV/OTT -IPTV Encoder Decoder
	4* HD-SDI H.264 Decoder IRD1245	1*ASI/2 FTA DVB-S2/16 IP TO HD-SDI 4Channel, mpeg2/h.264/AVS video decoding	-UDP/IP Encoder Decoder -Dvb-S2 to SD/HD-SDI - Cable TV system
	4* HD-SDI H.264 Decoder IRD1345	2* IP/4* CI DVB-S2 Inputs, 4 * HD -SDI/AV out, MPEG2/H.264/AVS, Dual Power supply	
	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
	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