Caster-R315

1/2/4/8Channel SDI IPTV Decoder

Caster-R315 is a real time H.264 (H.265 option) or MPEG-2 decoder that receives IP transport streams and decodes them to SDI/HD-SDI/HDMI. Embedded Linux Based, Remotely Manageable, SD or HD, H.264/AVC (H.265 option) TS Video and Audio Decoder for Receiving Live Streams with Most Any Protocol or Wrapped IP Input coming from IP Cameras or any make and model of encoder.

Supports HTTP Live (HLS), UDP, RTP, RTSP, HTTP, RTMP Multicast, Unicast IP streaming in LAN, WAN and Converts the H.264 AVC (H.265 option), MPEG-2 Compressed Digital Video and Audio into Professional Digital SDI or HD-SDI Output. Audio Support for AAC. Decodes at .1 to 15 Mbps.

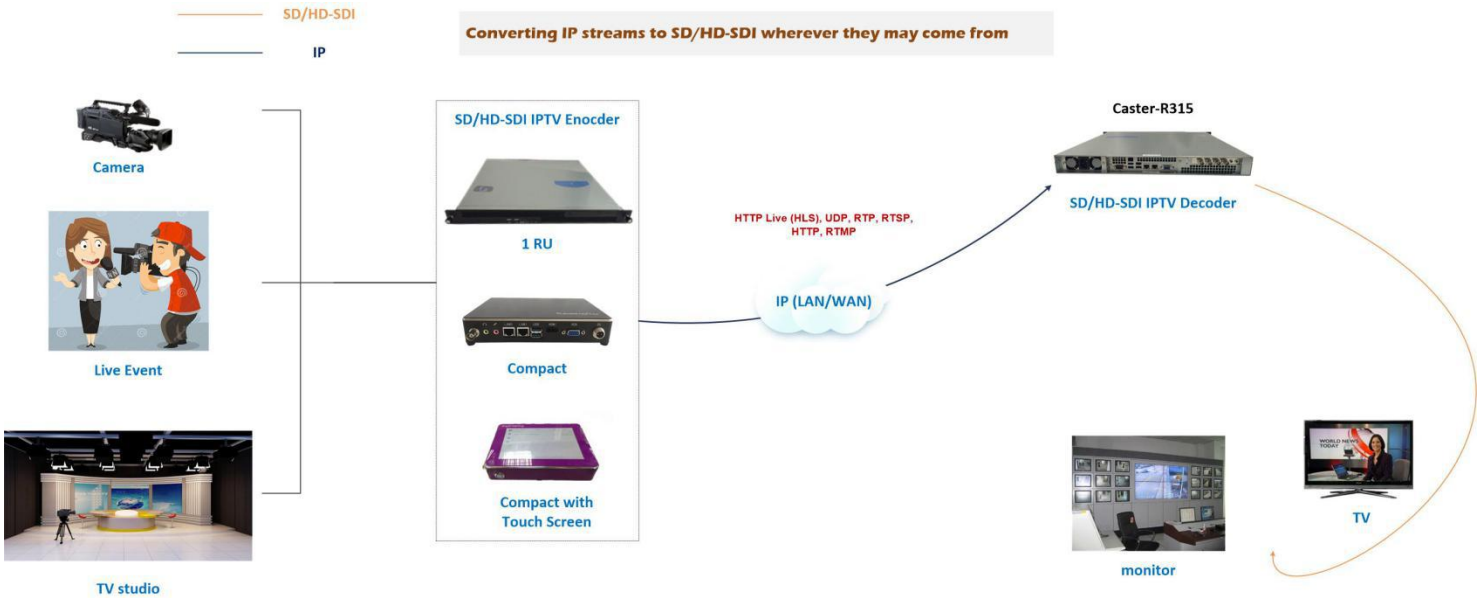
Ideal Decoder for Receiving and Professional Decoding of "Poor" Video from IP Cameras, Remote Sites, Content Delivery Networks (CDNs), or IPTV Compatible Appliances or Players. Uses Proprietary Algorithms to Decode Video from Bursty IP Cameras via our "IP CAM Smoother". It allows rendering of high quality video content to deliver high performance digital user experience, and is suitable for applications such as Video on Demand, converged communication, gaming consoles and proliferating smart CE devices.

Features

- Supports both HD and SD H.264/MPEG-4 AVC or MPEG-2 decoding, H.265 decoding option
- Input: Bursty or smooth IP (H.264, MPEG-2, H.265 option)
- Output: SD/ HD-SDI; support simultaneously SDI/HDMI output
- Security scanned for vulnerabilities
- IP Input protocols: HTTP Live (HLS), UDP, RTP, RTSP, HTTP, RTMP (pushed from Flash server)
- Supports H.264 High Profile @ Level 4.0 (HP@L4), MPEG-2, H.265 option
- Supports 1080i, 1080p, 720p, 480i, 480p, CIF, QCIF, qHD, H.264up and many others, and custom resolutions
- Picture-in-picture (PIP) operation supported
- DVB subtitles can be included in transcoded streams (burned-in), offers subtitles with 100% compatibility with all existing devices
- Supports HDTV output formats SMPTE-274M/SMPTE- 296M-2001, ITU-R BT.656
- Color Space: 4:2:0 for H.264
- Audio Input: AAC, MPEG-1 Layer II, AC3
- Audio Output: Embedded pass-through
- Remote GUI includes some scheduling
- Can be used to store or time-delay incoming stream with optional storage add-on
- 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
- Web management

Application

- Converting IP streams to SD/HD-SDI wherever they may come from
- Streaming video from remote sites from HTTP Live (HLS), UDP, RTP, RTSP, HTTP, RTMP compatible sources such as IP cameras or YouTube
- TV studio SD/HD-SDI programs point to point transmision in ethernet
- IP Camera Decode



TECHNICAL SPECIFICATIONS

Input

IP Input protocols	Mpeg-2/H.264/H.263/MPEG4 SP/MPEG4 ASP; H.265/HEVC optional
	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)
Audio Input Type	AAC, MPEG-1 Layer II, AC3, optional MP3
Bit rate mode	IP-multicast, IP-unicast VBR, CBR, ABR, NearCBR SPTS (IP streaming) MPEG-2 TS/pS Unicast and Multicast TS/RTP/UDP streaming Adobe Flash / RTMP Apple HTTP Live streaming/HLS Microsoft Smooth streaming Unicast and multicast MPEG-DASH(Option) IGMP V2 & V3 IPV4 support

Output

	1/2/4/8 SD/HD-SDI out SMPTE ST-2082
Resolution	1920 x 1080P 1280x720P, 720x576P 720x480P, 704x480P, 854x480P(16:9) 640 x 480P, 480 x 320P, 320 x 240P
Decoding level	level 1, level 2, level 3, level 4, level 4.1, level 5.1
More Settings	Field mode, GOP Align, Video Delay, Enhance Delay
TS	PIDs (PMT/Video/Audio), PCR delay (ms), disp interval

Video decoding

	Smart de-interlacing
	Picture resizing
	Logo/graphics overlays
	Crawling text
Picture aspect ratio:	4:3, 16:9, 1:1, automatic mode
Codec Format:	H.265/HEVC Main and Main-10 H.264/AVC BL/MP/HP up to level 5.2
Bit Depth:	8/10-bit
Video Bitrate:	100k~50Mbps
Frame Rates:	25/30fps , Adjust 5-30fps Automatic detection of Scene Switching
	GOP adjustable

Audio decoding

Audio decoding	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

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.
DB Management	Backup, Restore, Update, Initialization

Management

User Interfaces	Full control via web GUI
Management	Web interface
Firmware Updates	Via Web UI

Environment

Size	1 RU
Power Supply	110 ~ 240 VAC
Operation Temperature	0 ~ 50℃ (32 ~ 122°F)
Storage temperature	-40 ~ 70℃ (-40 ~ 158°F)
Power Consumption	200W

Supported Resolutions – Input

1920 x 1080, 1280x720, 720x576
720x480, 704x480, 854x480(16:9)
640 x 480, 480 x 320, 320 x 240

