Cisco AnyRes Live 5300HE

Product Overview

The Cisco® AnyRes Live 5300HE represents a new generation of the Cisco AnyRes Live Family, with support for advanced encoding of live video. It is redefining the video experience with best-in-class quality for real-time media-delivery applications such as live sports, 24-hour programming, Internet Protocol television (IPTV), enterprise, education, and government video.

The Cisco AnyRes Live 5300HE delivers the highest-quality encoding using Advanced Video Codec (AVC), and with the option, for the first time the capability to encode a stream with High-Efficiency Video Codec (HEVC) encoding technology developed by Cisco.

With its easy-to-use interface, the Cisco AnyRes Live 5300HE lets you support a single SD serial digital interface (SDI) source and output multiple formats, while offering a range of SD resolutions targeted at set-top boxes, smart TVs, gaming consoles, PCs, tablets, and mobile phones. The flexibility to add an HD option also protects your investment.

This comprehensive, reliable platform has the flexibility to stream multiple formats to any device, including iPhones, iPads, smartphones, and PCs.

Product Specifications

Table 1 lists specifications for the Cisco AnyRes Live 5300HE.

Table 1. Product Specifications

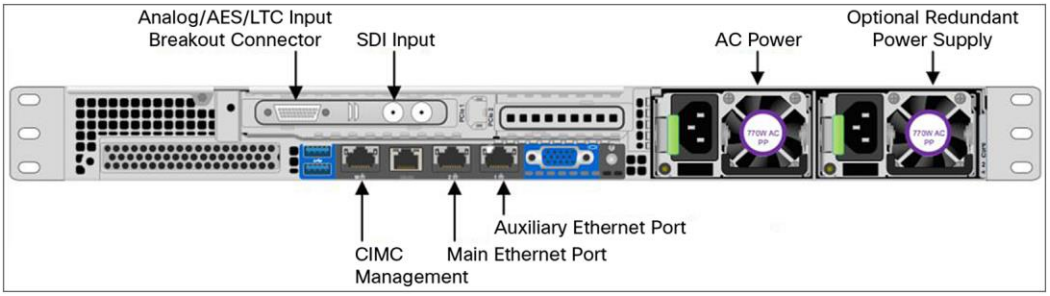
Inputs	
Physical SDI interface	• Input interfaces: 1 x BNC 75-ohm • Input: SD-SDI format: SMPTE 259 • Input: HD-SDI format: SMPTE 292/296: S/W **option**
Analog interface (breakout cable)	• Composite (through one locking BNC connector) • Component (through three locking BNC connectors) • S-Video (through two locking BNC connectors)
Standard definition	• SD 720 x 480i29.97 or 720 x 576i25
High-definition SDI (option)	• HD 1920 x 1080i, or 1280 x 720p • Frame rates with single 5300HE: 24, 25, 29.97, 30, 50, 59.94, and 60 fps
Audio	• Embedded audio: SMPTE 296M, up to four stereo pairs: PCM or precompressed • Stereo balanced audio (through two locking XLR connectors) • Audio Engineering Society and stereo through locking XLR connector

Output Codecs	
HEVC: option	• Resolution: 640x460 to ATS, HLS • H.265 main profiles • Closed captions according to 608/708
AVC	• Up to 720p25/29.94 AVC interlaced or progressive output to TS, HLS, flash, HDS, HSS, and MPEG-DASH • H.264 baseline, main, and high profiles • Closed captions according to 608/708
VC-1	• Up to 1080i25/29.97 or 720p50/59.94 interlaced or progressive output to smooth streaming to Microsoft Internet Information Services (IIS) server • VC-1: simple, main, and advanced profiles • Windows Media 9 video: simple and main profiles • Windows Media audio (WMA) and WMA Professional • Closed captions according to 608/708
Audio	• AAC audio (low complexity, HE-AAC v1, and HE-AAC v2) output to TS, HLS, flash, HDS, HSS, and MPEG-DASH • AC-3 stereo encoding 2.0: output to TS • AC-3 pass-through (can be 2.0 or 5.1): output to TS • DD encoding, DD+ encoding, or DD to DD+ transcoding, all in either 2.0 or 5.1: output to TS: **option**
Output Formats	
MPEG-2 transport stream	• Multicast streaming • Standard or adaptive transport stream • Ability to start or stop archive while encoder is running
MPEG DASH	• MPEG-DASH (ISO-BMFF) • Multiple languages • Teletext subtitles formatted to Web Video Text Tracks (WebVTT) or SMPTE-TT: from VBI (SD-SDI), or OP47 (HD-SDI)
Apple HLS	• Full support for Apple HLS, including WebVTT, PlayReady, and timed metadata • Integrated iPhone segmenter: streams transport-stream segments directly to web server • Multiple languages • Teletext subtitles transformed to WebVTT: VBI (SD-SDI), or OP47 (HD-SDI)
HSS	• HTTP smooth streaming to IIS server • Teletext subtitles transformed to TTML/DFXP: from teletext PIDs, VBI (SD-SDI), or OP47 (HD-SDI)
Flash streaming	• HTTP dynamic streaming (HDS) to flash media server: option • Real-Time Messaging Protocol (RTMP) stream over TCP to flash media server
Third-Generation Partnership Project (3GPP)	• H264/AVC baseline with AAC audio (low complexity, HE-AAC v1, and HE-AAC v2) • H.263 profile 0,3; levels 10, 20, 30, and 45 with AMR-NB audio • Real-Time Transport Protocol (RTP): either controlled through Real-Time Streaming Protocol (RTSP) or as raw RTP output
Baseband Video Processing	
	• Scaling • Cropping • Advanced deinterlacing • Inverse telecine • Adaptive image filtering • Slate insertion • Logo insertion
Metadata Processing	
	• Automated ad insertion with playlists generated by playout servers • Support for slate insertion to remove broadcast ads • Ability to remonetize video with Internet ads for browser, mobile, and set-top box • Ad avail blanking and black-out capability based on SCTE-104 on SDI • Nielsen ID3 support • Support for auxiliary data (EBIF, KLV, V-Chip, and CGMS-A)

Encryption and DRM	
	● Comprehensive encryption and digital rights management (DRM) support
Redundancy	
	● An N:M redundancy with SDI (SD or HD) router control is supported by Cisco Video Service Manager (VSM)
Certifications	
Safety	● UL 60950-1: No. 21CFR1040 Second Edition ● CAN/CSA: C22.2 no. 60950-1 Second Edition ● IEC 60950-1 Second Edition ● EN 60950-1 Second Edition ● ASINZS 60950-1 ● GB4943 2001
EMC	● FCC (CFR 47, Part 15) Class A ● AS/NZS CISPR22 Class A ● CISPR2 2 Class A ● EN55022 Class A ● CES003 Class A ● VCCI Class A ● EN61000-3-2 ● EN61000-3-3 ● KN22 Class A ● CNS 13438 Class A
Physical	
Physical and power	● Dimensions (H x W x D) 1.7 x 16.9 x 31 in. (4.32 x 43 x 78.7 cm) (1 rack unit [1RU]) ● 770W power supply (optional redundant power supply available) ● AC input voltage range 90 to 264 VAC (self-ranging, 100 to 240 VAC nominal) ● AC input frequency range: 47 to 63 Hz (single phase, 50 to 60 Hz nominal) ● AC line input current (typical) 1.32A at 100 VAC/.64A at 208 VAC ● AC line input current (maximum 100% CPU load) 2.04A at 100 VAC/.98A at 208 VAC ● Connectivity: two 1-Gbps Ethernet ports (10/100/1000BASE-T Ethernet)
Temperature	● Operating temperature: 41 to 95°F (5 to 35°C) ● Nonoperating (storage): -40 to 149°F (-40 to 65°C)
Humidity	● Operating: 10 to 90% noncondensing at 82°F (28°C)
Control	
	● Remote web-based GUI ● Customizable encoding templates ● Local user interface ● Simple Network Management Protocol Version 2 (SNMPv2) for traps ● XML Simple Object Access Protocol (SOAP) messaging service ● Front-panel connector: one KVM console connector (supplies 2 USB, 1 VGA, and 1 serial connector) ● Standard connectivity: one 10/100/1000BASE-T Ethernet or two 1-Gb Ethernet ports

Figure 1 shows a rear view of the Cisco AnyRes Live 5300HE.

Figure 1. Rear View of Cisco AnyRes Live 5300HE



The Cisco Integrated Management Controller interface is a standard feature on all Cisco AnyRes Live encoders

Warranty Information

Find warranty information on Cisco.com at the Product Warranties page.

Ordering Information

To place an order, visit the Cisco Ordering Home Page. To download software, visit the Cisco Software Center.

Table 2 provides ordering information.

Table 2. Ordering Information

Product Name	Part Number
Cisco AnyRes Live 5300HE	SPN-5300HE-K9
Optionally the Cisco AnyRes Live 5300HE can be ordered with:	
• VP6 format option	LSPN-VP6
• HTTP dynamic streaming (HDS) to flash media server	LSPN-HDS
• Cisco AnyRes Live: HEVC	LSPN-HEVC
• Cisco AnyRes Live, internal, SDI, 1 in/4 out, HD option	LSPN-HDLOW-SDI
• DD or DD plus encoding, or DD to DD plus transcoding (1/stereo)	LSPN-DD-DDP-XC

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For More Information

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