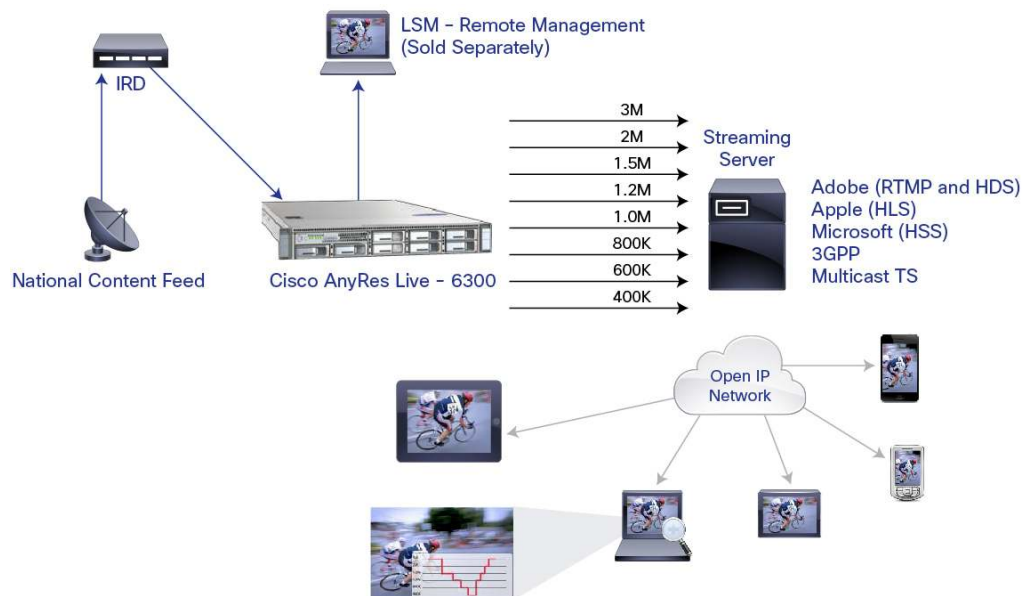


Cisco AnyRes Live - 6300

Next generation Cisco® AnyRes Live advanced, live standard-definition (SD) and high-definition (HD) video encoding solutions are redefining the online video experience. They offer best-in-class quality for live media delivery of applications, such as live sporting events, web streaming, broadband TV, IPTV, enterprise, education, or government video. The Cisco AnyRes - 6300 is a next-generation IP input transcoder offering greater output stream densities than previous generations of media processors.

The Cisco AnyRes Live - 6300 is a one-rack-unit (1RU) form factor that lets you use 1 to 16 input channels with 1 to 16 output resolutions per input, based on configuration (refer to Table 2). This transcoder is managed with an intuitive web-based user interface that allows full control of the system, so you can quickly transform the IP video source into multiple Internet-ready streams. The robust, reliable platform can stream multiple formats to the latest end-user devices, including set-top boxes, smart TVs, gaming consoles, PCs, tablets, and mobile phones (Figure 1). Cisco AnyRes Live was the first to offer full support for, and continues to lead the market in, adaptive bit rate (ABR) streaming, including Apple HTTP Live Streaming (HLS), Microsoft Internet Information Server (IIS) HTTP Smooth Streaming (HSS), and Adobe HTTP Dynamic Streaming (HDS). The Cisco AnyRes Live - 6300 can also detect broadcast cue messages and translate critical ad metadata into ad markers appropriate for the Flash and Silverlight platforms, as well as Apple iOS devices.

Figure 1. Cisco AnyRes Live - 6300 Workflow Example



Protect Your Infrastructure Investment

Built for IP networks, the Cisco AnyRes Live - 6300 helps simplify integration into even the most complex environments. An all-digital IP signal flow dramatically reduces data center costs, by reducing the need for expensive headend technology and specialty infrastructure. It also provides an exceptional level of flexibility and failover. The Cisco AnyRes Live - 6300 offers input and output flexibility by allowing different configurations to be selected based on your streaming needs. This flexibility helps ensure that, as your streaming requirements change, the Cisco AnyRes Live - 6300 is ready to deliver. Because it is multiformat from the start, you do not need to add appliances every time you add a format. The patent-pending Cisco AnyRes Live Core Software technology allows you to continue to upgrade your existing Cisco transcoder with the latest and most innovative technologies.

Why Cisco AnyRes Live - 6300?

- Cisco AnyRes Live - 6300 offers full support for adaptive streaming, including Apple iPhone and iPad streaming (HLS), Microsoft Smooth Streaming (HSS), and Adobe Dynamic Flash Streaming (HDS).
- This powerful and flexible platform supports the output of multiple formats from one appliance while offering a range of SD and HD resolutions targeted at set-top boxes, smart TVs, gaming consoles, PCs, tablets, and mobile phones.
- Designed for easy setup and management, the web-based interface of the Cisco AnyRes Live - 6300 lets you control the transcoder from any networked computer. Scheduling capabilities allow you to set up future one-time or recurring events, and an XML application programming interface (API) allows you, or third-party applications, to control the transcoder with automated commands.
- To provide exceptionally high-quality video, Cisco starts with multiple preprocessing options, adds powerful Intel® Sandy Bridge eight-core processors, uses patent-pending dynamic complexity balancing, and exposes one of the most comprehensive lists of advanced compression settings available. No other transcoder allows you to customize your settings like this one.
- The Cisco AnyRes Live - 6300 supports multiple captioning and subtitling options, including open captions, closed captions, Synchronized Accessible Media Interchange (SAMI) captions, script streams, cue points, Teletext, and Digital Video Broadcasting (DVB) open subtitling (bitmapped). This flexibility gives you multiple ways to reach a broader base of users and meet government or corporate requirements.

Features of the Cisco AnyRes Live - 6300

Table 1 provides the features and benefits of Cisco AnyRes Live - 6300.

Table 1. Features and Benefits of the Cisco AnyRes Live - 6300

Feature	Benefit
Latest Features	<ul style="list-style-type: none">• Updated H.264 codec for market-leading video quality• Adobe HDS, including Primetime server support• Nielsen ID3 support
Input Density and Flexibility	<ul style="list-style-type: none">• Up to 6 HD or 16 SD input channels (Refer to Table 2 for supported densities.)• Ingest H.264 or MPEG-2 in a MPEG-2 transport stream over IP• Multiple program transport stream (MPTS) or single program transport stream (SPTS)
Multiple Levels of Redundancy	<ul style="list-style-type: none">• Six Ethernet ports for redundant input, output, and management interfaces• Output to two separate media servers simultaneously• Capability for any Cisco encoder on the network to act as a backup for any other Cisco encoder, taking advantage of the IP-routed video• Slate insertion on video loss• Dual power supplies

Feature	Benefit
Advertising and Monetization	<ul style="list-style-type: none"> Automated ad insertion with play lists generated by playout servers Support for slate insertion to remove broadcast ads Capability to remonetize video with Internet ads for browser, mobile devices, and set-top box SCTE-35 support via IP source, manually in UI, or via API messages
Adaptive Bit Rate (ABR)	<ul style="list-style-type: none"> Full support for ABR streaming <ul style="list-style-type: none"> HTTP Live Streaming to iPhone and iPad Microsoft Smooth Streaming, including support for H.264 PlayReady digital rights management (DRM), supporting highly secure live publishing solutions Adobe HTTP Dynamic Streaming, including Closed Captioning, ad insertion and support for Primetime Origin server Support for low-latency live Smooth Streaming and multilanguage Smooth Streaming Added support for distribution format exchange profile (DFXP), providing industry-standard solutions for subtitling Smooth and Flash streams
Backup and Recovery	<ul style="list-style-type: none"> Failover and redundancy options when paired with Linear Stream Manager (sold separately) Dual power supplies Automatic stream recovery following power loss

Input and Output Densities of the Cisco AnyRes Live - 6300

Table 2 provides input and output densities of the Cisco AnyRes Live - 6300.

Table 2. Input and Output Densities of the Cisco AnyRes Live - 6300

Density Solutions	1x16	2x12	3x8	6x6	8x4	10x3	16x1
Inputs	1	2	3	6*	8	10	16
Outputs	16 per input	12 per input	8 per input	6 per input	4 per input	3 per input	1 per input
Total output	16	24	24	36(SD), 36(HD) *	32	30	16
SD	Yes	Yes	Yes	Yes	Yes	Yes	Yes
HD	Yes	Yes	Yes	Yes*	No	No	No

* Standard 6x6 preset may not be supported with some HD configurations.

Specifications of the Cisco AnyRes Live - 6300

Table 3 provides specifications of the Cisco AnyRes Live - 6300.

Table 3. Specifications of the Cisco AnyRes Live - 6300

Inputs	
Video	<ul style="list-style-type: none"> Two 1-Gbps Ethernet input ports Two 1-Gbps Ethernet output ports Two 1-Gbps Ethernet management ports Support for SD and HD H.264 over MPEG-2 TS MPEG-2 over MPEG-2 TS
Audio	<ul style="list-style-type: none"> HE-AAC (v1 and v2) audio input support MPEG-1 Layer II MPEG-2/4 AAC AC-3 audio passthrough Mono audio input support (AC-3 Mono not supported)

Codecs	
Windows Media	<ul style="list-style-type: none"> • Smooth Streaming to IIS server (H.264 and VC-1) • H.264 PlayReady DRM including: BuyDRM, Vualto and Irdeto • Windows Media 9 (WMV3): Simple and main profiles • VC-1 (W VC1): Simple, main, and advanced profiles • Windows Media Audio and Audio Professional • VC-1 and Windows Media ASF file (.wmv) • VC-1: push or pull mode from encoder
H.264 Flash (Real Time Messaging Protocol [RTMP] and HDS)	<ul style="list-style-type: none"> • Dynamic Flash streaming to Flash Media Server or Primetime Origin server • RTMP stream over TCP to Flash Media Server • HTTP to Primetime Origin server • H.264/AVC: Baseline, main, and high profiles • AAC audio (low complexity, HE-AAC v1, and HE-AAC v2)
H.264 Multicast MPEG-2 Transport Stream	<ul style="list-style-type: none"> • Standard or adaptive transport stream • Capability to start or stop archive while encoder is running • SCTE-35 passthrough • AC-3 audio passthrough
H.264 iPhone and iPad	<ul style="list-style-type: none"> • H.264/AVC: Baseline, main, and high profiles • AAC audio (low complexity, HE-AAC v1, and HE-AAC v2) • Integrated iPhone segmenter: Streams transport stream segments directly to web server • Stream with FTP, HTTP, File, or Webdav • ID3 timed metadata and timed metadata time code • AES encryption, Verimatrix (VCAS) and DRM: PlayReady and Irdeto
Third-Generation Partnership Project (3GPP)	<ul style="list-style-type: none"> • H.264/AVC baseline • AAC audio (low complexity, HE-AAC v1, and HE-AAC v2) • H.263 Profile 0,3; Levels 10, 20, 30, and 45 • AMR-NB audio • Real Time Streaming Protocol (RTSP), Real-Time Transport Protocol (RTP), Session Description (SDP) output
Control Processing	<ul style="list-style-type: none"> • Remote web-based GUI • Customizable encoding templates • Local user interface • SNMPv1 and SNMPv2 • XML Simple Object Access Protocol (SOAP) messaging service
Preprocessing	
	<ul style="list-style-type: none"> • Scaling • Cropping • De-interlacing • Inverse telecine • Adaptive Image Filtering
Certifications	
Safety	<ul style="list-style-type: none"> • 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: Emission	<ul style="list-style-type: none"> • FCC (CFR 47, Part 15) Class A • AS/NZS CISPR22 Class A • CISPR2 2 Class A • EN55022 Class A • ICES003 Class A • VCCI Class A • EN61000-3-2 • EN61000-3-3 • KN22 Class A • CNS 13438 Class A
Physical and Power	<ul style="list-style-type: none"> • Dimensions (H x W x D) 1.7 x 16.9 x 28.5 in. (4.32 x 43 x 72.4 cm) 1 rack unit [1RU] • 650W power supply (optional redundant power supply available) • AC input voltage range 90 to 264 VAC (self-ranging, 180 to 264 VAC nominal) • AC input frequency range: 47 to 63 Hz (single phase, 50 to 60 Hz nominal) • AC line input current (typical) 3.5A at 100 VAC/1.68A at 208 VAC • AC line input current (maximum 100% CPU load) 4.80A at 100 VAC/2.30A at 208 VAC
Temperature	<ul style="list-style-type: none"> • Operating temperature: 32 to 104°F (0 to 40°C) • Nonoperating (storage): -40 to 158°F (-40 to 70°C)
Humidity	<ul style="list-style-type: none"> • Nonoperating: 5 to 93% noncondensing • Operating: 10 to 93% noncondensing
Hard Drives	<ul style="list-style-type: none"> • Two 500-GB front-accessible, hot-swappable, 2.5-inch SAS/IEC 60950-1 Second Edition
Front Panel Connector	<ul style="list-style-type: none"> • One KVM console connector (supplies 2 USB, 1 Video Graphics Array (VGA), and 1 serial connector)

Warranty Information

Warranty information is available on Cisco.com on the [Product Warranties](#) page.

Ordering Information

To place an order, visit the [Cisco Ordering Homepage](#), or contact your Cisco representative. To download software, visit the [Cisco Software Center](#). For part numbers, refer to Table 4.

Table 4. Ordering Information

Product Description	Part Number
Cisco AnyRes Live - 6300 Multi-IP input encoder	SPN-6300-K9

Cisco Services

Cisco Services brings together the people, processes, tools, and partners that can help accelerate service providers' success by using their IP Next-Generation Network (IP NGN) architectural platforms. Cisco Services focuses on enhancing business outcomes through network, services, and operational transformation. Through a collaborative approach and tailored engagements, Cisco services can help accelerate time to market, mitigate risk, reduce cost through improving operational efficiencies, and help maintain the user experience.

Cisco Services' approach and differentiation in services is based on broad network capabilities and a wealth of experience in providing solutions to service providers in all sectors around the world. That includes over 20 years of involvement in the market with services and solutions that are strategically aligned with service provider needs. Cisco Services has also made a significant commitment to research and development, developing innovative roadmaps and solutions to help keep service providers ahead of the competition.

For More Information

For more information about Cisco AnyRes Live products, please contact your Cisco account representative.

<http://www.cisco.com/en/US/products/ps13270/index.html>.



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