

Cisco Encoders for AT&T U-Verse

In these challenging times it is more important than ever for local governments to connect with their constituents—and local governments are rising to the challenge by offering more and better ways to communicate. In opening up these channels of communication, government entities also understand the responsibility to deliver a quality solution. Delivering quality video streaming requires optimum video quality; robust, 24x7 operation; and flexible, scalable solutions that can be upgraded to support future requirements. Whether you are publishing a stream to your local IPTV provider or broadcasting over the web, a robust, easy-to-use appliance that delivers great quality video at an affordable price is the ideal solution.

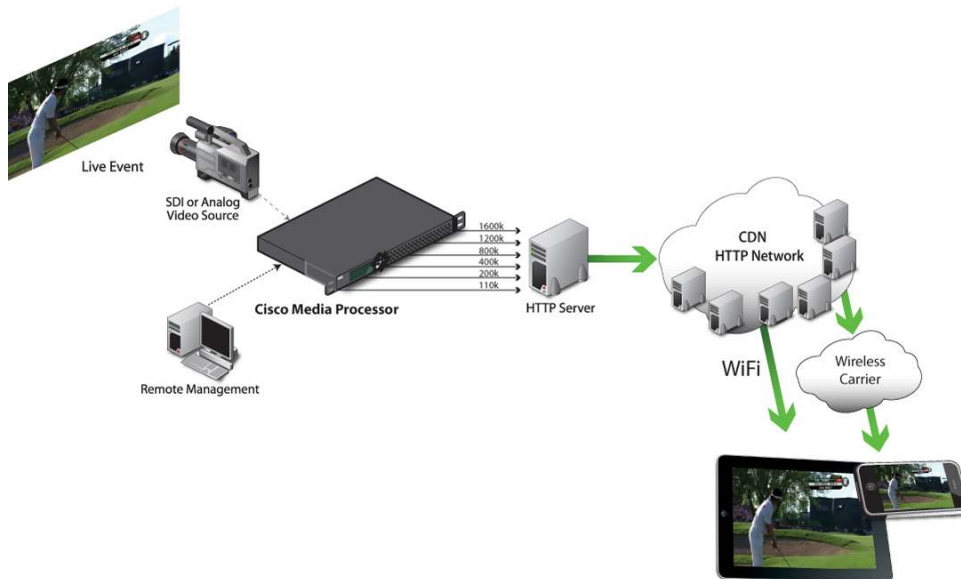
The Cisco® Media Processor Family of live streaming encoders delivers best-in-class quality for live video streaming applications, whether through an IPTV solution such as AT&T's U-verse, Internet streaming using Windows Media technologies, or streaming directly to content delivery networks (CDNs) to allow broad, scalable distribution.

The Cisco Media Processors provide highly efficient device management through local, web, and Simple Network Management Protocol (SNMP) interfaces. Based on the Cisco patent-pending technology platform, the core encoding software of the processors supports multiple streams at various bit rates for an optimized end-user experience, and alerts that pinpoint errors quickly, increasing the reliability of live broadcasts. Cisco Media Processors are also robust enough for 24x7 streaming.

The Cisco AS3005 Series Media Processor (Cisco AS3005) was built to AT&T's requirements and is the only live streaming encoder that has passed AT&T's stringent lab testing for U-verse deployments. Although other encoders may advertise that they are compatible with AT&T's U-verse system, only the Cisco AS3005 has been certified by AT&T labs. When AT&T installs managed public, educational, and governmental (PEG) solutions, AT&T uses the Cisco AS3005 as the standard.

Revolutionize Your PEG Programming with Cisco AS3005 Series Media Processors

- Give your community increased access to your content; the Cisco AS3005 lets you stream to your IPTV provider and to your website—and you can set it up in minutes.
- Share meetings, community events, classes, and emergency information quickly and easily; built-in presets make it simple for anyone on your staff to start streaming content.
- Get award-winning quality and professional, reliable results in an affordable solution.
- Stream in the right aspect ratio and resolution—you will have no more square video streams.



Why Cisco AS3005?

- It is the only live streaming encoder certified by AT&T for use in U-verse for PEG.
- Give the Cisco AS3005 power, a video source, and an Ethernet connection and you are ready to stream in minutes. The Cisco AS3005 also comes with built-in authentication to the most popular CDNs for true ready-to-use functions.
- The easy-to-use Cisco AS3005 web-based user interface provides everything you need to set up your jobs.
- With Cisco AS3005 calendar-based scheduling, you can set up events—even recurring events—in advance, and let the processor do the rest.
- With the Cisco AS3005, you get 24-hour reliability. This hardened, dedicated encoding appliance has high-grade components. Alarms and management systems help operators rapidly resolve any problems that may arise.
- As a network appliance, the Cisco AS3005 is designed to be used remotely, in fleets, or locally to give a reliable, high-quality experience.

Features of Cisco AS3005

If you need a live streaming encoder for a PEG implementation, the Cisco AS3005 Series Media Processors support:

- Windows Media Video 9 VC-1 Main and Advanced profiles
- Video bandwidth: 1.25 to 1.4 Mbps
- Input video format: NTSC
- Frame rate: 30 or 29.97 frames per second (fps)
- Scanning type: Noninterlaced
- Key frame distance: 4 seconds
- Buffer size: 2 seconds

- Output resolution: 480 x 480 (and the Cisco AS3005 Series tells the player to display at 640 x 480, so you will not have a square picture)
- Captioning: Open and closed captions
- Audio encoding format: Windows Media Audio (WMA)
- Audio streaming, including support for second audio program (SAP)
- Audio bandwidth: 96 kbps
- Audio sample rate: 48 kHz
- Streaming protocol: HTTP
- Streaming mode: Constant bit rate (CBR)
- Streaming format: Unicast
- Addressing: Public IP address
- Output: ASF network pull
- Input physical connection: Component, composite, S-Video, and standard definition (SD)

Table 1. Cisco AS3005 Series Media Processor Specifications

Inputs	
Video	<ul style="list-style-type: none"> • SD • NTSC and PAL • SD-SDI (BNC): SMPTE 259M • Composite (through one locking BNC) • Component (through three locking BNCs) • S-Video (through two locking BNCs)
Audio	<ul style="list-style-type: none"> • Three stereo pairs over system diagnostic interface (SDI) embedded (BNC) • Stereo balanced audio (through two locking XLR connectors) • Advanced Encryption Standard (AES) and stereo through locking XLR
Codecs	
VC-1	<ul style="list-style-type: none"> • Windows Media 9 (WMV3): Simple and Main profiles • VC-1 (WVC1): Simple, Main, and Advanced profiles • Windows Media Audio • Windows Media Audio Professional (Cisco AS3005 only) • AC3 pass-through in transport stream
Output	
IP Stream	<ul style="list-style-type: none"> • VC-1: ASF stream over TCP or User Datagram Protocol (UDP) • VC-1: Push or Pull mode from encoder • VC-1: MPEG-2 transport stream over TCP or UDP (Cisco AS3005 only)
Local Archive	<ul style="list-style-type: none"> • VC-1 and Windows Media ASF file (.wmv) • VC-1 Advanced profile: MPEG-2 transport (Cisco AS3005 only)
Control	<ul style="list-style-type: none"> • Remote web-based GUI • LCD front panel • Customizable encoding templates • Local user interface • SNMP

Processing	
Preprocessing	<ul style="list-style-type: none"> • Scaling • Cropping • De-interlacing • Inverse telecine • Adaptive image filtering
Encoding	<ul style="list-style-type: none"> • Adaptive group of pictures (GOP) • Closed captioning through SAMI and user data • Capabilities exchange answer (CEA) 608 and 708 translation • Interlaced and progressive modes • Dynamic complexity balancing
Certifications	
Safety	<ul style="list-style-type: none"> • UL 60950-1:2003 • CAN/CSA – C22.2 no. 60950-1-03
EMC	<ul style="list-style-type: none"> • FCC (CFR 47, Part 15) Class A • CE marking
Physical and Power	<p>Dimensions (H x W x D): 1.72 x 17.0 x 18.21 in. (4.37 x 43.18 x 46.25 cm) (Cisco AS3005)</p> <p>Power: 100–240 VAC full range, 160W</p> <p>Connectivity:</p> <ul style="list-style-type: none"> • Two 10/100/1000BASE-T Ethernet • One 10/100BASE-T Ethernet <p>Ambient temperature:</p> <ul style="list-style-type: none"> • Operating temperature: 32 to 122F (0 to 50°C) • Nonoperating (storage): 14 to 140F (–10 to 60°C) <p>Relative humidity: Nonoperating: <95% noncondensing</p>



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