



4Caster[™] Enterprise Series Real-Time MPEG-4/H.264 Encoders for Enterprise, Government, and Education



Envivio® 4Caster™ Enterprise Series encoders provide real-time MPEG-4 encoding and recording for enterprise,

- High-quality, highresolution real-time MPEG-4 ASP and AVC encoders
- Reduce travel expenses with improved communication and productivity
- Move from analog TV distribution and tape-based systems to full digital TV distribution over IP
- Timely delivery of corporate news to employees worldwide
- Front panel, web interface, and Room Control
- Single encoding for playback on to PC, Mac, TV sets, and Plasma display
 - Live rebroadcast of commercial channels over enterprise networks
 - Channels for internal television digital head-ends
 - •Rebroadcast and archiving of videoconferencing sessions from traditional H.323 equipment
 - Corporate news broadcast
 - Distance learning and training
 - Digital signage for videobased advertising and communication
 - IP conferencing
 - Surveillance

government, and education users. They offer broadcast video quality and lowlatency encoding while respecting regulatory and network constraints specific to corporate environments. The products offer simultaneous multicast streaming and recording, and are housed in a compact, rack mountable chassis that can be controlled locally via a front panel, or remotely via a web interface or room control systems.

Features

- MPEG-4 Advanced Video Coding (AVC/H.264) Main and Baseline Profiles, and MPEG-4, Part 2, SP, and ASP video encoding support.
- High Efficiency Advanced Audio Coding (HE-AAC) support.
- ISMA compliant.
- Control from front panel, web interface with SNMP support, or room control systems (e.g., AMX or Crestron).
- Playback on PC, Mac, or Plasma TV display.
- Ability to record and stream video simultaneously.
- Simultaneous encoding of multiple languages.
- Closed captioning support.
- Cisco ACNS Content Delivery Network compatibility for corporate internal delivery.
- Akamai network compatibility for Public Internet Delivery.
- Constant and Variable bit rate modes for optimal network performance.
- Store and forward.

Benefits

- High-quality video at low data rates using MPEG-4 ASP and AVC/H.264 encoding.
- Sharper image quality.
- Low-latency from 700 ms end-to-end delay.
- Significant reduction in network bandwidth usage.
- Designed and optimized specifically to operate over IP networks.
- Single encoding for playback on multiple devices (TV, PC, Mac, PDA, mobile phone).
- · Compact rack-mount design.

Technical Specifications

	4Caster Enterprise 2001	4Caster Broadcast 3500
Input		
	Analog composite (PAL/NTSC) S-Video	
Video		SDI - Serial Digital Interface (625 /525) IEEE 1394 DV Component
Audio	1 Channel (1 stereo or dual mono)	3 channels (3 stereo or dual mono)
	Analog Balanced (XLR) Analog Unbalanced (RCA)	
		Digital AES/EBU SDI embedded
Output		
File Output	MPE	EG-4
IP	RTP/UDP Variable packet size ISMA compliant multicast/unicast IP streams SDP file	
	1 x Ethernet (10/100 Base T)	2 x Ethernet (10/100 and 100/1000 Base T)
Encoder		
Video	CIF to CCIR-601 resolution (720 x 480/576 pixels) MPEG-4 SP levels 0-3	
	MPEG-4 ASP levels 0-4 Upgradeable to H.264 baseline level 1-2	MPEG-4 ASP levels 0-5 H.264 baseline level 1-2.2 H.264 main level 1-2.2
	Data rate: 20 kbps to 4 Mbps	Data rate: 20 kbps to 6 Mbps
Audio	1 stereo or dual-mono channel	3 stereo or dual-mono channels
	MPEG-4 AAC-LCD	
	Upgradeable to HE-AAC	MPEG-4 HE-AAC (with Parametric Stereo)
Supported Standards		profile 0 and 1 IA version 2 Profile 2
Advanced Processing	ISMA version 1 profile 0 and 1, upgradeable to ISMA version 2 profile 2 Video adjustments (brightness, contrast) Frame resizing, frame subsampling Low delay mode Noise filtering Scene change detection with adaptive GOP Inverse Telecine Error resilience (MPEG-4) Advanced output rate control with bandwidth smoothing	
	Deinterlacing	Motion compensated temporal filtering and deinterlacing
		Close caption support
Advanced Features		d forward
Control		
Local	Front-panel LCD control Pre-programmable setups	
Remote	Web-based management SNMP control MIB and monitoring (control and redundancy available with 4Manager) Available API for remote control	
Physical and Power		
Dimensions	1RU 483 mm (W) x 508 mm (D) x 45 mm (H) 19" (W) x 20" (D) x 1.75" (H)	1RU 483mm (W) x 508 mm (D) x 45 mm (H) 19" (W) x 20" (D) x 1.75"(H)
Weight	8 kg (18 lb)	12 kg (26 lb)
Power Supply	100-240 VAC auto-ranging, 150 W maximum	
Operating Conditions	Ambient temperature Operating temperature: 0 to 50° C (32 to 122° F) Non-operating/storage -40 to 70° C (-40 to 158° F) Relative humidity	
	Non-operating: 95% at 30° C (86° F) no-condensing	

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