haivision network video

COMPACT H.264 CODECS **OSCAR**

The Most Compact and Affordable
H.264 / MPEG-4 AVC Video Encoder / Decoder

HaiVision's OSCAR sets a new standard for robust and compact MPEG-4 AVC (H.264) encoding and decoding. Designed for today's networked video applications that demand high quality video and audio, the OSCAR is the ideal IP video edge appliance for both centralized and geographically dispersed network video applications. Combining high performance with unparalleled simplicity and reliability, HaiVision's newest appliance has been specifically designed for integrators targeting commercial, institutional, and industrial applications.

The Best Solution for High Performance Video Collection or Distribution
HaiVision's OSCAR delivers the best price / performance value available for H.264 / MPEG-4 AVC streaming. Fully MPEG-4 AVC standard compliant, the OSCAR is the perfect platform for integrators that require the efficient performance of H.264 or that need to address progressive system architecture. The OSCAR's affordability makes it ideal for integrators requiring many encoders to deliver DVD quality at up to1.5 Mbps to storage servers or for distribution within an IPTV, QuickTime™, or Podcast infrastructure.

Compact Encoder or Decoder – Same Great Convenience
The OSCAR is available as an encoder or decoder IP appliance, both supporting composite video, s-video, and stereo audio in a compact, reliable, and fanless chassis. Power (DC) is supplied through an external power supply (with standard AC power cable) to a locking power connector. The chassis can sit three wide on a standard 19" shelf with positive alignment for stacking.

Ideal for IPTV Integrated Systems
The OSCAR is available with a powerful application programming interface (API) allowing centralized control of any device. As well, the encoder features a text/date overlay feature that is perfect for managing multiple encode points (cameras or video feeds). Supporting industry standard H.264 (MPEG-4 AVC) video compression and AAC audio compression, the OSCAR is fully compatible with HaiVision's haiPLAY and Apple QuickTime™ and QuickTime Streaming Server™ (QTSS)environments and other industry standard server platforms.

Modularity and Operational Simplicity = Maximum Flexibility and Lowest Cost-of-Ownership
Dynamically swap between multiple configurations. Manage and monitor status of any number of channels from anywhere on the network. The OSCAR is simply the most flexible, reliable, and manageable system available.
Easy to Manage
Configuration and management is simple. Access the OSCAR administrative interface through any common web browser. The OSCAR is plug and play with saved start-up configurations.

KEY FEATURES

- MPEG-4 AVC (H.264) encoding or decoding
- 100% compliant MPEG-4 AVC baseline & enhanced profile
- 16 kbps to 1.5 Mbps video bitrate
- Full or controllable frame rate
- QSIF to high resolution SD video
- Ultra compact design, fanless, low power
- Fully compatible with HaiVision's haiPLAY and QuickTime™ players
- Web or TCP control
- S-Video and composite
- NTSC / PAL

OSCAR CONFIGURATIONS

- Single chassis encoder
- Single chassis decoder

OSCAR SOLUTIONS

- Point to Point Streaming
- Remote encoder to QuickTime Streaming Server
- Remote encoder to haiPLAY and QuickTime™ player

H.264 / MPEG-4 AVC

HaiVision's OSCAR fully complies with the latest video and audio compression standards. H.264 and MPEG-4 AVC refer to the same widely accepted video compression standard as established by the joint efforts of the MPEG community and the ITU. MPEG-4 AVC achieves the same video quality as MPEG-2 but at a 60% reduction in bandwidth, therefore, all infrastructures are affected by dramatic economies when integrating with MPEG-4 AVC – especially bandwidth and storage. With HaiVision's H.264 implementation on the OSCAR, users can achieve DVD quality video at 1.5 Mbps, something only achievable at ~4 Mbps with MPEG-2. Furthermore, the OSCAR incorporates resolution, video quality, and frame rate control to optimize the video performance towards low bandwidth network challenges for both NTSC and PAL.

Configuration Guide

S-240E OSCAR Encoder - H.264 (MPEG-4 AVC) IP Video Encoder - Composite, S-Video, and audio input; NTSC/PAL; 16 kbps to 1.5 Mbps; 10/100 Ethernet; 9VDC Input with 90-240 VAC 50/60Hz External Power Supply with Locking Connector.

S-240D OSCAR Decoder - H.264 (MPEG-4 AVC) IP Video Decoder - Composite, S-Video, and audio output; NTSC/PAL; 10/100 Ethernet; 9VDC Input with 90-240 VAC 50/60Hz External Power Supply with Locking Connector.

OSCAR ENCODERS

S-240E (OSCAR Encoder System)

Video Input
Composite Analog (NTSC,PAL), 75Ω BNC
S-Video (NTSC,PAL), mini-DIN

Audio Input
Analog Stereo, Line level, 3.5mm

Network Interface
Ethernet 10/100 Base-T, auto-detect, Half/Full-duplex, RJ45

S-240E (Single Encode Chassis)

Dimensions
24mm H x 149mm W x 202mm D (0.92"H x 5.85"W x 8.0"D)

Power
9VDC, 27W (each blade),
100-240VAC 15W external power supply

Audio Channels
2 per video channel

CODEC Specifications

H.264 / MPEG-4 Advanced Video Coding
AV Standard: NTSC & PAL
AVC Profile: Baseline & Main Profile
AVC Level: L3 (Full-D1)

Video Resolutions (NTSC/PAL)
D1: 720h x 480/576v
4CIF: 704h x 480/576v
½ D1: 352h x 480/576v
2CIF: 704h x 240/288v
CIF: 352h x 240/288v
QCIF: 176h x 120/144v

Frame Rate (NTSC/PAL)
Fixed Output: 30/25 fps
Selectable Frame Rate Decimation

MPEG Structure
Framing: IP (no B frame)
Video Bit Rate: 16 kbps to 1.5 Mbps
Rate Regulation: CBR, VBR
GOP Size: 1-300

Audio Coding
AAC-LC
Stereo
Sampling: 48, 32, or 16 kHz
Bit Rate: 32-48, and 64 kbps

IP Network Interface

Standard
Ethernet 10/100 Base-T, auto-detect, Half/Full-duplex

Connector
RJ45

IP Protocols
HTTP (Web Browser)
RTP Streaming
Supports IGMP v2
Unicast (up to 10 streams), Multicast

Session Control
RTSP, SDP

OSCAR DECODERS

S-240D (OSCAR Decoder System)

Video Output
Composite Analog (NTSC,PAL), 75Ω BNC
S-Video (NTSC,PAL), mini-DIN

Audio Output
Analog Stereo, Line level, 3.5mm

Network Interface
Ethernet 10/100 Base-T, auto-detect, Half/Full-duplex, RJ45

S-240D (Single Decode Chassis)

Dimensions
24mm H x 149mm W x 202mm D
(0.92"H x 5.85"W x 8.0"D)

Weight
Encoder unit - 2.5 lbs
Decoder unit - 2.5 lbs

Power
9VDC, 27W (each blade), 100-240VAC
15W external power supply