

Low Latency Digital Audio Video Codec H.264 MPEG-4 AVC between 256 kbps and 2 Mbps

HaiVision's **TASMAN DIGITAL** is the ultimate network video appliance designed for performance, flexibility and value. Based on H.264 video compression technology (known also as MPEG-4 AVC) the **TASMAN DIGITAL** delivers highly efficient video performance over a broad range of bit rates - from engaging high resolution, interactive "talking heads" at 700 kbps to crystal clear broadcast quality at 1.3Mbps to fluid, full motion video at SIF resolution and 256kbps - all at 30 frames per second with perfect audio sync. HaiVision's TRUE H.264 video compression delivers DVD quality network video at more than a 60% reduction in bandwidth required by traditional MPEG-2 based systems.

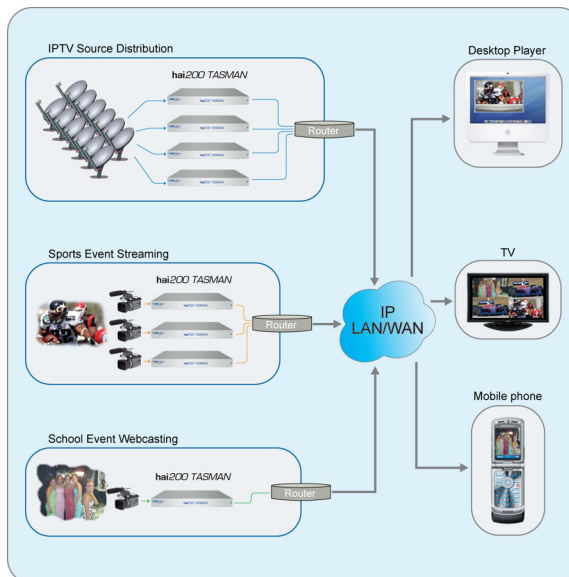
From HaiVision, the market leading vendor of high performance network video systems for telepresence, corporate, education, medical and IPTV applications, the **TASMAN DIGITAL** is designed for performance streaming of high quality A/V at the best price-performance value available today.

The **TASMAN DIGITAL** is the ideal system for point to point communications, video backhaul, or video broadcast and streaming. The **TASMAN DIGITAL** achieves an industry leading sub-200 millisecond latency allowing integrators to deliver compelling communications systems or to address mission critical video delivery. The **TASMAN DIGITAL** supports industry standards, with proven inter-operability with standards based Set Top Boxes and Soft Players. Offering the most efficient quality to bandwidth compression available, the **TASMAN DIGITAL** delivers clear and consistent high resolution video rendering of every motion and nuance of the picture and clear, precise stereo audio.



Audio / Video

- Encoder/decoder, encoder or decoder configurations
- HaiVision TRUE H.264 MPEG-4 AVC compression core
- Full motion, full frame rate high resolution
- 4:3 or 16:9 aspect ratio
- Full resolution D1, also CIF, HHR, HVR
- Digital SDI and AES/EBU Audio with Composite & Analog Audio
- Super wide band audio from 20Hz to 22kHz, Balanced XLR or RCA
- Audio encoding from 64 to 256 kbps



Networking and Control

- Flexible API for 3rd party integration
- Intuitive User Interface
- Advanced control features including auto-discover, presets and confidence viewer
- Optional built-in decoder (Communicator) for Low Latency End to End
- Transport Stream for STB compatibility
- Unicast and Multicast streaming
- Consistent, controlled bandwidth

COMMUNICATIONS

Joining rooms or facilities together seamlessly to create compelling, unified communication environments

VIDEO BACKHAUL

Looking for low cost, easy maintenance methods for aggregating high quality audio/video to a central location

PERFORMANCE STREAMING

Establishing point to point or multipoint audio video feeds with performance and quality a critical concern

HaiVision TRUE H.264 Compression Core

H.264 (also called MPEG-4 AVC or MPEG-4 Part 10) is the first video compression standard jointly issued by ITU and MPEG (ISO/IEC) designed for both interactive and programmed video delivery over a full spectrum of bit rates. It has eclipsed the previous MPEG-4 Part 2 standard in terms of resolution, bandwidth stability and compression ratio, and saves over 60% of the bandwidth required by MPEG-2 for DVD quality video.



With the **TASMAN DIGITAL**, integrators can present affordable network video solutions. A T1 (1.5 Mbps) is fully sufficient for very high quality "talking head" video. A dual (or bonded) T1 will deliver DVD quality accomodating the most "action packed" video. Even at video bit rates as low as 500 kbps, the TASMAN delivers remarkable, full resolution, full frame rate video, with crystal clear audio perfectly in sync.

Configuration Guide

The **TASMAN DIGITAL** is available in three basic configurations to address specific needs:

S-200ED-SDI	<i>TASMAN DIGITAL Communicator</i>	Encoder / Decoder With SDI, Composite Video, Embedded AES/EBU Audio, Analog Audio
S-200E-SDI	<i>TASMAN DIGITAL Streamer</i>	Encoder With SDI, Composite Video, Embedded AES/EBU Audio, Analog Audio
S-200D-SDI	<i>TASMAN DIGITAL Receiver</i>	Decoder With SDI, Composite Video, Embedded AES/EBU Audio, Analog Audio

Specifications – TASMAN DIGITAL

VIDEO ENCODING / DECODING

Signal

SDI 525/625 75Ω BNC (SMPTE 259M)
Composite 75Ω BNC

Compression Standard

MPEG-4 AVC (Part 10)/H.264
ISO/IEC 14496-10
Baseline & Main Profiles
Level 3.0 and lower Intermediate Levels
I, IP, IBP, IBBP, IBBBP framing

Resolutions NTSC/PAL

Full-D1 720x480/576
Half-D1 352x480/576

Latency

As low as 180ms (encoder)

Bit Rates

From 150 kbps to 2Mbps

Traffic Shaping

Constant (CBR)
Variable (VBR)
Average (ABR)

Group of Pictures

Variable GOP size
w. Intra-frame insertion at scene cut

Filtering

Advanced & Variable De-Blocking Filter

AUDIO ENCODING/DECODING

Signal

2 Channels SDI Embedded (SMPTE 272M)
2 analog audio channels – in (RCA or XLR)
2 analog audio channels – out (RCA or XLR)
Specify RCA or XLR when ordering analog cables.

Compression Standard

MPEG-4 AAC-LC
ISO/IEC 14496-3

Bit Rates

From 64 to 256 kbps

NETWORK INTERFACES

Standard

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

Connector

RJ45

Protocols

Transport Stream over UDP/RTP
Transport Stream over RTP/RTCP
Direct RTP mode (RFC 3984)
RTP/RTCP
Unicast / Multicast (IGMPv2)
HTTP (built-in web server)

Connectivity

Internal Web Server
Internal Streaming Server

CONTROL INTERFACE

Web-based User Controls

Layered access controls from presets to granular settings
Advanced features set including stream presets, embedded viewer and performance stats
On-line complete user documentation

Control API

Open, documented HTTP commands

PHYSICAL

Dimensions

432 mm x 89 mm x 483 mm (W x H x D)
19" rackmount bracket included

Weight

16Kg

Power Requirements

90 – 260V AC / 50 – 60 Hz
125W max

Temperature

0° to 50°C operating
-20° to 80°C storage

Relative Humidity

Up to 90% non-condensing

Certification

UL/CSA/CE
FCC Part 15, Subpart B, Class A

HaiVision Systems Inc.
4445 Garand
Montréal, QC, H4R 2H9
Canada
Tel: (514) 334-5445 Fax: (514) 334-0088
sales@haivision.com

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