

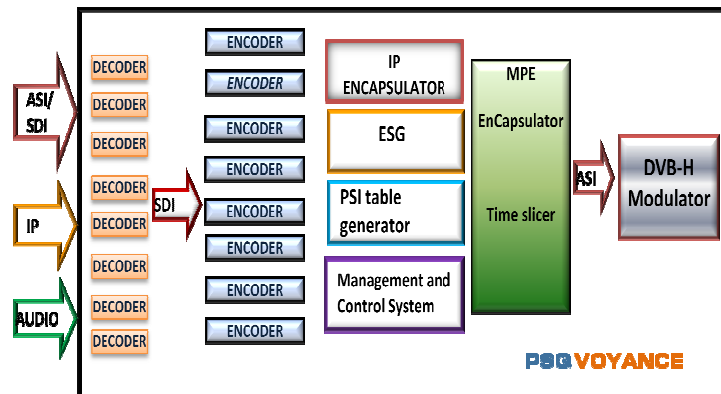
**Voyance
Platform**

**PSQ
Mobile TV DVB-H HEADEND**

A cost-effective Mobile TV Headend with multi-codec, and multi-stream encoder, Encapsulator and modulator



PSQ's Voyance platform is a real time H.264, multi-standard encoder optimized for mobile TV services. The system can stream up to 8 video channel and 24 audio channels. It provides an advanced cost effective Mobile TV services to end users for different types of services. The system includes Up to 8 decoders, 8 MPEG-4 Encoders, IP and MPE encapsulator, Electronic Service Guide (ESG), DVB-H signaling generator and a DVB-H modulator in a 2RU module.



The Voyance mobile TV headend supports simultaneously up to eight independent digital video input (SDI), and MPEG transport streams over ASI or IP inputs and up to 24 embedded AES/EBU digital audio in SDI input. The IP Encapsulator of the unit accepts MPEG 4 video signal from the encoders and converts it into an IP stream. It manages different data types including a single program transport stream and embedded SDI audio streams.

Voyance MPE encapsulator inserts data services into MPEG 4 DVB compliant transport stream, preparing an ASI signal which can be distributed DVB-H content via a terrestrial network directly to handheld, mobile phones and PCs. Voyance modulator is a cost-effective Hardware board to support ATSC, DVB-H and DVB-T. It will help the customer to run the system to test, repair, or run a performance testing It can also be used for signal validation or checking out whether the receivers can handle a new transport stream.

PSQ's Voyance is an end to end solution for DVB-H Mobile TV from SDI input to the handheld receivers.

Key Features

- ASI, SDI, IP input
- Multi channel capable, Up to 8 video channels
- Up to 24 Audio channels
- H.264 and MPEG-4 part 10
- Video bit rate: 50 kb/s – 2 Mb/s
- Variable frame rate up to 30fps
- IP and MPE encapsulator
- ASI DVB-H compliant output signal
- Streaming over RTP/UDP/IP
- Integrated scrambling for OMA BCAST and CBMS
- User-friendly Web-based control management
- 10/100Base-T Ethernet output for 3G applications
- CBR and VBR encoding
- User friendly ESG
- Fully compliant with DVB standards and generates: MPEG PSI tables (PAT, CAT, and • PMT) and DVB tables (NIT, SDT, TDT, and INT)
- Multi-standard modulator with support for ATSC, DVB-H and DVB-T (HW option)
- All-channel upconverter 47 to 862MHz covering entire VHF and UHF band
- Output amplifier with programmable -30 to -3 dBm attenuator

Product specification

Video

Input:

- Up to 8 video channels
- SDI (up to 8 channels)
- SD MPEG-2/MPEG-4 transport stream over IP
- SD MPEG-2/MPEG-4 transport stream over ASI

Encoding:

- Video format: 4:2:0
- Video standards: PAL, NTSC
- Resolutions: from 80x64 to 416x240
- MPEG-4 AVC Baseline Profile
- MPEG-4 part 10 Simple Profile
- MPEG-4 part 10 Advanced Simple profile
- Video bit rate 50Kb/s - 2Mb/s
- Automatic scene cut detection
- Adaptive GOP
- Resizing, cropping, picture adjustments,
- Bit-rate mode: CBR, VBR
- Video bit rate: 50 kb/s – 2 Mb/s
- Frame rate 1 to 30 FPS

Connectors:

- BNC 75 Ohm
- Ethernet interface (10/100/1000 Base-T)

Audio

Input

- Audio: AES/EBU, SDI embedded
- Embedded SDI Up to 12 stereo channels or 24 Mono channels available

Encoding

- MPEG-1 Layer II audio, MPEG-2 AAC

Connector:

- BNC 50 Ohm for Embedded SDI
- Ethernet interface (10/100/1000 Base-T)

Modulator

- RF Frequency Range 47 .. 862 MHz ±1ppm
- Bandwidth 5 ... 8 MHz
- RF Signal to Noise (S/N) 44 dB typ. @ 474 MHz
- Output Level (DVB-H) -30 to -3 dBm

ESG

- Service guide for up to 50 channels
- Up to 50000 Events

Output:

- DVB-H compliant ASI output
- Multi-protocol encapsulation (MPE)
- IPv4 or IPv6 datagrams2
- Connector BNC 75 ohm
- UHF DVB-H modulated signal, 50-ohm BNC

Functionality:

- DVB-ASI
- Multi-protocol encapsulation (MPE)
- IPv4 or IPv6 datagrams2
- Streaming over RTP/UDP/IP
- Multi-stream management
- Unicast and multicast
- SDP file and SAP announcement support
- MPEG-4 AVC over MPEG-2 TS
- Video adjustment (brightness, contrast)
- Deinterlacing
- Frame Resizing
- Custom frame rate (from 5 to 30 fps)
- Wide Screen Signaling (WSS/AFD) handling
- Logo insertion
- Option to bypass decoders and encoders

MPEG-2 DVB Tables Management

- Fully compliant with DVB standards
- Generates MPEG-2 PSI tables (PAT, CAT, PMT)
- Generates DVB SI tables (NIT, SDT, TDT, and INT)

Physical Characteristics

- Size: 2 RU x 19",
- weight: 32 lbs
- 100-240V, 50-60 Hz power supply

Environmental Conditions

- Operating temperature: 10° to 35°C (50° to 95°F)
- Non-operating temperature: -40° to 70°C (-40° to 158°F)
- Operating humidity: 10–90% relative humidity, non-condensing
- Non operating humidity: 5–95% relative humidity, non-condensing

Ordering Information

Name	Input video	Encapsulator	Modulator	Size
Voyance 8+	8 ASI/SDI	X	X	2RU
Voyance 8	8 ASI/SDI	X		2RU
Voyance 4+	4 ASI/SDI	X	X	1RU
Voyance 4	4 ASI/SDI	X		1RU

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