



MGW Prism

IPTV Transcoder for Over-The-Top Services
and Mobile streaming



MGW Prism

IPTV Transcoder for Over-The-Top Services and Mobile streaming

Consumption of Over-The-Top (OTT) video streaming services is growing exponentially. Cable, Satellite and ISP's face the daunting challenge of broadcasting their content to an ever growing variety of Smart TV's, Mobile Phones and PCs. Adapting original content to each device, and their diverse set of operating systems, requires highly flexible transcoding technology.

VITEC's MGW Prism is the optimal solution for real-time IP video transcoding to all standard devices and players for the creation of broadcast quality multi-screen service.

High Performance and Easy Set-up Transcoding Platform

MGW Prism is a high-efficiency transcoding platform that combines a wide range of video codecs, advanced compression tools, broadcast and military metadata handling - all integrated into a 1-RU server platform that can be deployed in IT rooms, data centers or portable carts. Online video streaming services and enterprises can broadcast their content on everything from Mobile Phones and Tablets to IP Set-Top-Boxes with a transcoding system flexible enough to adapt content to any common device's network or streaming protocol.

Comprehensive Support

MGW Prism provides an "all-in-one" solution for streaming video to any hardware device or software player. It uses common protocols for Apple™ iOS™, Android™, Windows Mobile™, and other devices, as well as Apple™ HTTP Live Streaming, Microsoft Silverlight Smooth Streaming, MPEG-DASH/CMAF, Adobe™ Flash HTTP Dynamic Streaming, 3GPP / Edge, RTP, RTSP UDP and more.

The platform incorporates a built-in segmenter for the creation of the bandwidth efficient Adaptive Bit-Rate (ABR) streams and is capable of generating up to 16 video profiles for a single source. Each video stream is fully synchronized, to deliver exceptional picture quality in any network condition with dynamic, frame accurate and seamless transition between profiles on the viewer's screen.

The KLV metadata pass-through feature enables government and military entities to re-purpose incoming ISR and FMV content with additional compression while maintaining CoT data on the output stream.

Advanced Service-Provider Capabilities

MGW Prism packs a unique set of advanced capabilities such as logo insertion, Q-tone support for ad-insertion (SCTE-35), Closed Captioning, DVB subtitles and Teletext. Exceptional broadcast quality picture is achieved with its wide range of pre-processing tools that include adaptive de-interlacing, video resizing and frame rate down-conversion. The MGW Prism includes built-in Piff encryption for Microsoft™ Smooth Streaming and native interoperability with VeriMatrix™ HLS encryption for iPhones™, iPads™ and Android™ devices.



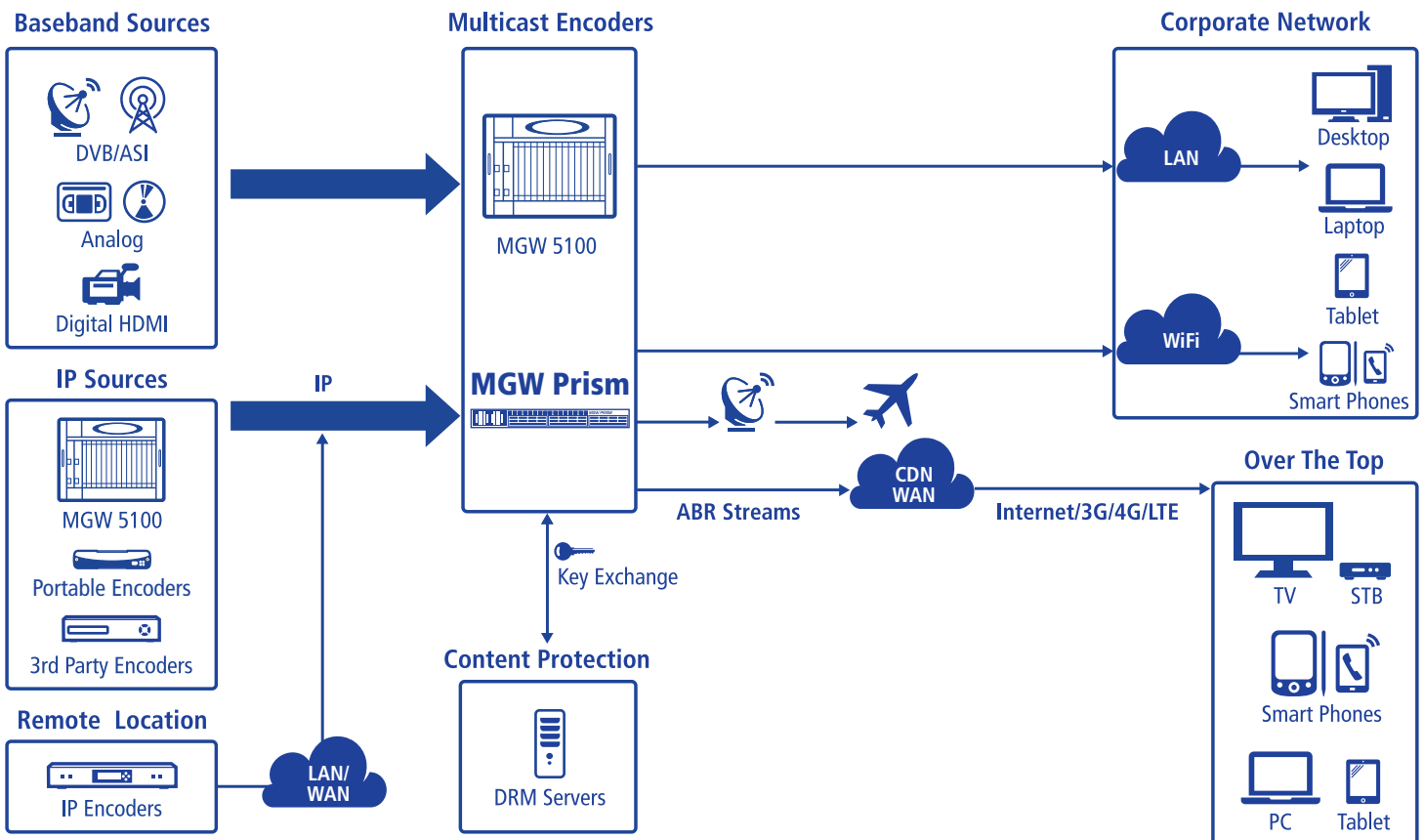


Benefits

- Best-in-class transcoding power - up to 30 services per platform
- Superb HD/SD picture quality in any bit rate (built-in downscaling)
- Apple™ HLS, MPEG-DASH\CMAF, Adobe™ HDS, 3GPP, RTP, RTSP, UDP
- Adaptive bit rate with up to 16 unique profiles per channel
- KLV/STANAG metadata PID pass-through
- Multi-audio support - up to 8 stereo pairs per video stream
- Built-in encryption for Microsoft Smooth Streaming™ and VeriMatrix™
- Integration with major CDN's including Akamai™, LimeLight™, Facebook Live and YouTube™
- High availability configuration with hot-backup

Applications

- Live delivery of News, Sports and Events
- Transcoding existing high bit rate MPEG-2 and H.264 content to efficient H.264 streams
- Converting newly HEVC formatted streams to existing H.264 streams
- Over-the-Top (OTT) Web Streaming IPTV services and PiP applications Broadband TV to multiple screens
- Uplink critical video content to airborne platforms



Technical Specifications

Input Streams

Video Codec

- MPEG-2 SD and HD
- H.264 / MPEG-4 AVC SD and HD
- HEVC / H.265 SD and HD

Audio Codec

- MPEG-1 Layer II, AAC, AAC HC, AC3

Encapsulation

- MPEG-2 transport stream over UDP/IP and RTP/RTSP

Video Pre-Processing

- Adaptive de-interlacing
- Video resizing
- Aspect-ratio conversion or pass-through
- Frame rate down-conversion / doubling: 1080i to 720p
- Color enhancement
- Logo / Slate insertion

Audio Pre-Processing

- Automatic gain control
- Audio level adjustment (per audio track)
- Stereo-to-mono down-mixing
- Audio re-sampling

Video Encoding

- H.264 / MPEG-4 AVC, BP/MP/HP, all levels, up to HD
- MPEG-2 MP@ML/HL, up to HD
- H.263 Profile 0 Level 45, QCIF or Sub-QCIF
- MPEG-4 SP Level 0 to 3, up to CIF
- Multi-Bitrate video encoding (MBR) / Adaptive Bit-Rate (ABR)

Audio Encoding

- Up to 8 discrete stereo audio pairs per video stream
- MPEG-1 Layer II (SPTS)
- AMR-NB (RTP)
- AAC, LC, HE v1, HE v2, in ADTS or LOAS/LATM

Physical

- Enclosure: Rack Mountable server, 1U high (includes mounting kit)
- Dimensions (WxHxD)
17.2 x 1.7 x 25.6 in. (437 x 43 x 650mm)
- Gross Weight 36 lb (16.33 kg)
- AC Input Voltage: 100-240VAC, 50/60 Hz auto-sense
- Rated Input Current: 100-240V, 8A-4A

Dual Power Supply

- 500W high-efficiency (94+%) power supply

Streaming Formats

- Apple™ HTTP Live Streaming (with embedded segmenter)
- Microsoft™ Live Smooth Streaming
- Adobe™ Flash HTTP Dynamic Streaming
- 3GPP / Edge
- RTP + RTCP/UDP
- IPTV & PiP: SPTS/UDP
- Protocols : FTP, HTTP, WebDAV, RTMP, UDP, RTP, RTSP

Ancillary Data Pass-through

- Up to 2 Teletext streams per video stream (SPTS)
- Up to 2 DVB-Subtitle streams per video stream (SPTS)
- Up to 2 KLV / SATANG streams per video stream (SPTS)
- Closed captioning (CEA-608)
- Ad-Insertion Q-tones (SCTE-35)

Encryption

- Native interoperability with Verimatrix™ (HLS)
- DRM Generic Interface (DGI)
- Microsoft™ Piff Protection for Silverlight Smooth Streaming

Video Processing Capacity

- HD/SD Transcoding to SD Up to 30
- HD to HD Transcoding Up to 8
- Unique ABR services with up to 3 profiles each Up to 8

Management

- HTTP Web management with intuitive GUI
- SNMP traps for integration to head-end management solution
- 4 x 100/1000BaseT network interfaces with teaming and redundancy options (for each node)

Compliance

- Operating Temperature Range
5°C ~ 35°C (41°F ~ 95°F)
- Non-Operating Temperature Range
-40°C ~ 60°C (-40°F ~ 140°F)
- Operating Relative Humidity Range
8% ~ 90% (non-condensing)
- Non-Operating Relative Humidity Range
5% - 95% (non-condensing)
- FCC standards: FCC Part 15 Subpart B Class A

Ordering Information

- 16619 - MGW Prism

USA, East Coast

2200 Century Parkway NE
Suite 900
ATLANTA, GA 30345
USA
T: +1-(404)-320-0110
E: atlanta@vitec.com

USA, West Coast

931 Benecia Avenue
SUNNYVALE, CA 94085
USA
T: +1-(800)-451-5101
E: sunnyvale@vitec.com

FRANCE

99 rue Pierre Sépard
92320 CHATILLON
France
T: +33-(0)1-46-73-06-06
E: france@vitec.com

GERMANY

Lise-Meitner-Str.15
24223 SCHWENTINENTAL
Germany
T: +49-(0)4307-8358-0
E: germany@vitec.com

UNITED KINGDOM

LONDON, UK
T: +44-79-71-54-25-21
E: uk@vitec.com

ISRAEL

11 Galgalei Haplada St.
HERZLIYA 4672211
ISRAEL
T: +972-(0)9-9709-200
E: israel@vitec.com

CHINA

BEIJING, P.R. China
T: +86-(0)10-5172-7086
E: china@vitec.com