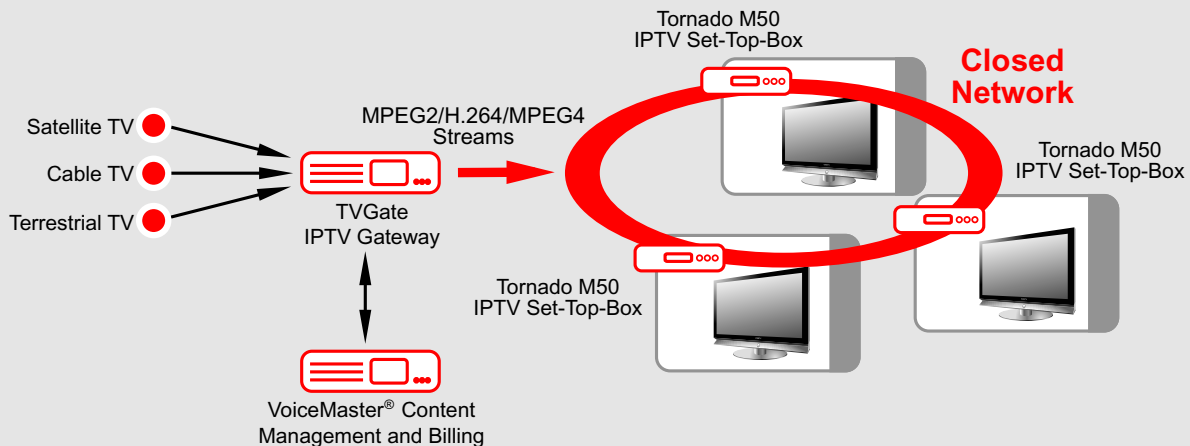# TVGate
IPTV Gateway

KEY FEATURES

- Multiple Encrypted/Unencrypted Channels
- MPEG4, H.264 and MPEG2 Support
- NTSC, PAL, SECAM Support
- Multiple Encryption Formats
- Multiple Video Formats
- Multicast, Unicast and Broadcast Distribution
- Multiple Streaming Servers Support
- Web Based Remote Management
- Integrated IPTV Delivery Solution

Product Overview

SysMaster TVGate IPTV Gateway is a robust and multi-functional digital video gateway designed to capture DVB-C/S/T streams and convert them to IP Transport Stream (TS) signal. The product receives DVB feeds from satellite, cable or terrestrial systems; it then decrypts streams, if necessary, and redistributes them in the form of TS packets via IP to the end-user Set-Top-Box (STB) devices. Typical TVGate applications include receiving and broadcasting IPTV channels using TS transmission protocol over Fiber, Ethernet, WiFi or other broadband infrastructure.

TVGATE IPTV GATEWAY

NETWORK DIAGRAM WITH TVGATE

Satellite TV
Cable TV
Terrestrial TV

MPEG2/H.264/MPEG4 Streams

TVGate IPTV Gateway

VoiceMaster® Content Management and Billing

Tornado M50 IPTV Set-Top-Box

Closed Network

Tornado M50 IPTV Set-Top-Box

Tornado M50 IPTV Set-Top-Box

TVGate
IPTV Gateway

Multiple Encrypted/Unencrypted Channels

The TVGate IPTV Gateway supports up to 20 encrypted or 30 unencrypted channels. Encrypted channels are decrypted via hardware decryption cards. The TVGate IPTV Gateway can process multiple channels on a singe card, if such channels use the same satellite/cable frequency, polarization, encoding and encryption type.

MPEG4, H.264 and MPEG2 Support

The TVGate IPTV Gateway supports MPEG4, H.264 and MPEG2 video streams. The product receives and redistributes such streams over IP without transcoding (encoding/decoding), thereby preserving their native quality and format. For example, if an input video stream comes in MPEG2 format from a satellite source, it will be redistributed in MPEG2 TS format over IP.

NTSC, PAL and SECAM Support

The TVGate IPTV Gateway is compatible with all major television broadcasting standards, including NTSC, PAL, and SECAM. The product also supports a number of PAL variations, including the more common B and G, and the less common I, D, K, 60, M, and N.

Multiple Encryption Formats

The TVGate IPTV Gateway supports multiple encryption formats. The product can interface with one or more hardware card readers to perform specific content decryption. Currently, TVGate supports most encryption formats used by cable and satellite operators.

Multiple Video Formats

The TVGate IPTV Gateway will work with wide variety of input cards that accept digital video/audio input such as DVB-S, DVB-C, DVB-T, ATSC, ASI, SDI, and analog A/V. The input versatility of the IPTV Gateway allows its implementations in diverse media broadcast environment.

Multicast, Unicast and Broadcast Distribution

The TVGate IPTV Gateway supports Multicast, Unicast and Broadcast distribution modes. In Multicast mode, the gateway sends Multicast MPEG2/MPEG4/H.264 Transport Stream packets directly to end-users' CPE devices (e.g. Set-Top-Boxes). In Unicast mode, TVGate sends TS packets to an IPTV streamer, such as iptvSwitch, which in turn re-streams the packets to end-users' CPE devices. Advantage of that method is that providers can exercise real-time control over end-users. The TVGate IPTV Gateway also supports broadcast distribution mode which is similar to the Multicast mode except that it does not use the IGMP protocol.

Multiple Streaming Servers Support

In a typical WAN environment, a single TVGate IPTV Gateway can upload video streams to multiple streaming servers. For each streaming server and each stream, TVGate utilizes UDP Unicast or TCP distribution. The number of streaming servers that the product can support depends on the number of streams per server and the bandwidth per stream.

Web-Based Remote Management

The TVGate IPTV Gateway offers convenient configuration and maintenance via a GUI console. Administrators can securely login to the console via a web browser and perform all necessary tasks remotely. That feature enables providers to easily outsource product administration to third parties and minimize operational costs.

Integrated IPTV Delivery Solution

Providers who want to offer voice, video and data services but want to minimize equipment integration costs will certainly appreciate the TVGate IPTV Gateway. The product easily integrates with SysMaster's VoiceMaster® Content Management and Billing, iptvSwitch Streaming Server and Tornado M10/M50 Set-Top-Box into a fully integrated solution for delivery of IPTV, Video-on-Demand, Pay-per-View, and other triple play services.