Overview

The MultiStreamer™ is a family member of our flagship cost effective origin encoders. This family has been in production for seven years and we have shipped over 3,000 units. It is designed as a general purpose workhorse, able to stream several simultaneous streams at different resolutions with any streaming protocols.

The MultiStreamer™ T+T2 4 Tuners/IP: Professional is a highly affordable Intel® Xeon® based multi channel RF to IP gateway and H.264 encoder and transcoder designed for capturing DVB-T or DVB-T2 content and streaming this content to iPads, iPhones, content delivery networks, and remote video capture devices.

The MultiStreamer T+T2 4 Tuners/IP: Professional is designed to be an affordable platform to ingest video from terrestrial broadcast stations, transcode the MPEG-2 to the H.264 standard, and provide for choices for resolutions, protocols, wrappers, and containers. This is easy to do since we are using Linux® and these outputs are well supported by the Linux® environment.

Inexpensive high volume hardware platforms combined with highly enhanced open source Linux® based software offer great value to all willing to embrace the future. We offer high performance streaming solutions that are based on open source libraries. We enhance the libraries by rewriting critical sections to obtain outstanding reliability and throughput.

This unit is designed to be affordable, scalable, and extendable. Modifications to video formats are easily created. Remote management and multi level security is built in.

Applications

- Streaming video to CDNs and web sites like Ustream®, Akamai®, Octoshape™, etc.
- Backhaul/Monitoring for Broadcasters
- Military, Corporate Video, Religious Services, Special Events

Features

- Thousands in use worldwide
- Inputs: Four DVB-T/DVB-T2 inputs (terrestrial digital), one GigE IP input
- Supports NewTek™ NDI® input
- Output: Multiple simultaneous IP streams through GigE port (RJ45) – Two 1080i/p streams, or one 1080 i/p and one 720p HD stream, at 6 Mbps; or 4 720p60 HD streams at 4 Mbps, or eight SD streams at 2 Mbps
- IP output protocols: UDP, RTP, HTTP, HTTP Live (HLS), RTMP (Open Flash)
- Certified by Akamai®
- Supports HLS (adaptive) for output to mobile devices and MPEG-DASH
- Supports logo insertion, text overlay, and SCTE 35 compliant cue tone insertion (“ad markers”) on outputs
- Web GUI is manageable from anywhere – includes some scheduling
- Able to upconvert incoming SD streams to HD, and scale down
- Tested with leading CDNs (Verizon®, Akamai®, Tulix™, Ustream®, etc.)
- Supports Octoshape™ and Verizon® upLynk natively
- Supports H.264 High Profile @ Level 4.0 (HP@L4)
- Supports 1080i, 1080p, 720p, 576i, 480i, 480p, CIF, QCIF, qHD, H.264up and many others, and custom resolutions
- Supports 50 HLS users natively. Optional built-in server supports 1,000+ simultaneous HLS, DASH, and/or RTMP users.
- Audio Output: AAC, MPEG-1 Layer II, optional MP3, and/or optional “SurCode for Dolby Digital” AC-3
- Support for Variable Bit Rate (VBR) encoding maximizes adaptive streaming video quality and bandwidth efficiency
- Tested to work with Atlas™, Wowza®, and Adobe® Flash® media servers
- Tested compatible with major brands of IP devices including Amino™, Roku®, Telergy, Android™, and Apple iPad® and iPhone®
- Tested compatible with major brands of professional H.265, H.264, and MPEG-2 decoders and video servers
- SNMP, REST, SOAP support for remote management and monitoring
- Relies on Intel® Xeon® processor
- Optional local storage

Thousands of MultiStreamers are in use worldwide, delivering live video from terrestrial broadcast DVB-T and DVB-T2 stations or microwave feeds to remote sites, content delivery networks, IPTV compatible appliances or players. They support stream scheduling and archiving options. Multiple simultaneous streams can be output, up to four simultaneous HD streams at 6 Mbps. H.264, H.265, and MPEG-2 transports are supported. The MultiStreamer™ is affordable, scalable, extendable, reliable, and fast.
Inputs/Outputs

<table>
<thead>
<tr>
<th>Protocol</th>
<th>TCP Ports</th>
<th>UDP Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>HTTP</td>
<td>80, 8000, 8001, 8080, 1-65535 (out)</td>
<td></td>
</tr>
<tr>
<td>HTTPS</td>
<td>443</td>
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<tr>
<td>RTSP</td>
<td>554, 7070</td>
<td>6970-7170, 5005</td>
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<td>RTMP</td>
<td>1935</td>
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<tr>
<td>RTP</td>
<td></td>
<td>6970-6999, 16384-32767</td>
</tr>
</tbody>
</table>

Sample of GUIs

Status Screen

Ports Utilized

Options
- Optional transcoding to H.265
- Archiving option: One terabyte of local storage (1 TB)
- Optional built-in “Mini Atlas” server supports 1,000+ simultaneous HLS, DASH, and/or RTMP users
- Optional DOZER™ Automated UDP Packet Recovery protocol, enabling error-free video delivery over UDP. DOZER ensures smooth MPEG-2, H.264, and optional H.265 delivery through DVEO patented algorithms for automated packet recovery and re-ordering of out-of-sequence packets.

Ordering Information

MultiStreamer T+T2 4 Tuners/IP: Professional in 1 RU system
Archiving Option: One terabyte of local storage (1 TB)