



# Intraplex® Ascent Media Gateway

High-Performance IP STL System for  
Video and Audio Distribution



Built on the proven, award-winning Intraplex® IP Link codec technology, GatesAir's **Intraplex Ascent Media Gateway** platform supports reliable and secure Cloud-enabled distribution of TV and radio programming with high-end features.

The Ascent Media Gateway is ideal for applications that require real-time distribution of UDP-based media over IP-based WANs or Microwave. This includes video programs for TV broadcast, and distribution of audio or FM/MPX signals to a large number of radio transmitter sites. This high-density solution reduces cost and provides a path for convergence of IT and broadcast infrastructure.

## Product Features

- The system supports any constant rate UDP over IP media. Tested with ATSC1 and ATSC3 for video, and AES3 and FM/MPX signals for audio.
- Supports point-to-point and point-to-multipoint with content replication at the receiver to feed up to 3 local destinations
- Protocol Encapsulation: Real-time Transport Protocol (RTP); Secure Reliable Transport (SRT)
- Streams: Multicast, unicast, and multi-unicast
- Capacity
  - Supports up to 50 Mbps of source rate per stream
  - Total capacity of 250 Mbps per server
- Number of streams per server: scalable up to 100 with the limitation of maximum capacity
- Server Specification
  - Intel i7, 4-core, 8 GB memory, 32 GB SSD
  - 3 Network Ports
  - OS: Ubuntu version 16.04
  - Available with single or dual power supplies
- Management
  - HTTP and HTTPS
  - Built-in access control (Firewalling) on each network port for security
- Web and SNMP for management
- Multiple web account types to restrict access
- Network reliability
  - Dynamic Stream Splicing with network and time diversity for "hitless" packet loss protection
  - Programmable RTP-level Forward Error Correction (FEC)
  - Secure Reliable Transport (SRT): new protocol provides automatic packet retransmission method
- IP Security
  - Access control per interface
  - Encryption of streams with AES 128/256

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### Product Details

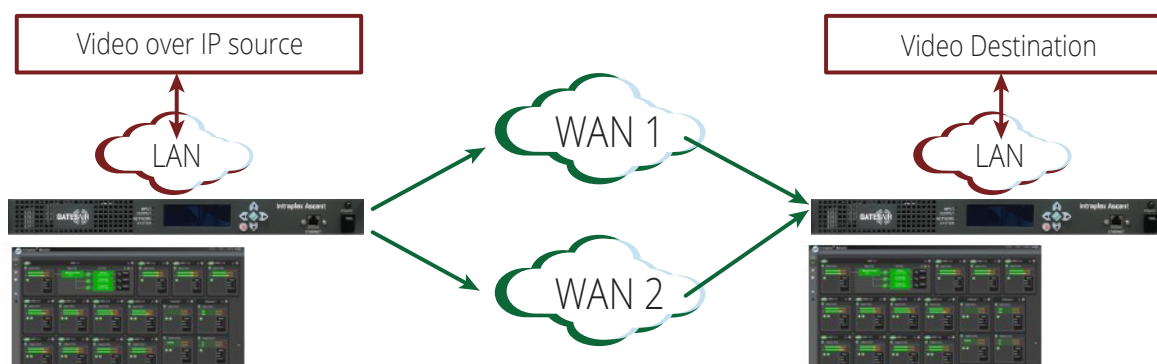
The Ascent platform continues the Intraplex tradition of reliable distribution with the Media Gateway over IP application. The platform provides a scalable, cloud-enabled solution for the distribution of video and audio signals with enhanced reliability and security with SRT (Secure Reliable Transport) protocol and Intraplex StreamSplicing®. SRT is an open-source protocol that provides low-latency, reliable and secure streaming of video and audio data. The

added capability of StreamSplicing over SRT provides enhanced reliability and security over multiple diverse networks. For uni-directional unicast network (i.e. STL Microwave), the reliability is accomplished using SMPTE-2022-2 and SMPTE 2022-7 “hitless” packet protection using FEC and a dual-WAN-networks scheme.

When using SRT on full-duplex links, the packet loss protection is provided using a built-in, real-time re-transmission

scheme, added via Intraplex StreamSplicing technology with diverse WAN links. The security of the content is handled by the built-in AES-128/256 payload encryption.

Ascent is built on Commercial-Off-The-Shelf (COTS) x86 architecture to leverage the scalability and cost of the technology. It is available as a 1RU (single PSU) or 2RU (dual PSU, FANs) branded hardware server and as a software-only option.



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### Specifications

*Specifications and designs are subject to change without notice*

Overview	
Streaming	<ul style="list-style-type: none"><li>- Up to 100 streams per system</li><li>- Point-to-Multipoint, with capability to feed 3 local destinations at the receiving end</li><li>- Source UDP stream up to 50 Mbps. Supports multiple sources per server for distribution of multiple programs</li><li>- Total capacity: 250 Mbps</li></ul>
Reliability	<ul style="list-style-type: none"><li>- StreamSplicing</li><li>- SRT (automatic re-transmission of lost packets) with or without Stream Splicing</li></ul>
Security	Stream: Encrypted SRT (AES-128/256) Access Control: User-settable firewall setting per interface
Management	Web: HTTP/HTTPS with multiple level of users SNMP: SNMPv2C/SNMPv3
Network Interfaces	3 x 10/100/1000Mbps Ethernet (RJ-45)
Mechanical and Environmental for Branded Servers	
Dimensions (H X W X D)	1RU: 1.75 x 19 x 18.1 in. (4.45 x 48.3 x 46.0 cm) 2RU: 3.5 x 19 x 18.1 in. (8.9 x 48.3 x 46.0 cm)
EIA Rack Mountable Weight	1RU: 5 lbs (2.27 kg) typical 2RU: 7 lbs (3.18 kg) typical
Power Supply	Main/Dual AC (2RU): AC 100-240 VAC, 50/60 Hz
Humidity	10% to 90% non-condensing
Operating Temperature	50° to 122° F (10° to 50° C)