

# AvediaStream® Gateway

AvediaStream g4448-us Gateway | avstr-g4448-us



The AvediaStream g4448-us Gateway captures live ATSC and ClearQAM TV and radio from terrestrial and cable sources and streams them across an IP network. With eight inputs in a single blade, the g4448-us combines low cost per channel with high reliability.

## Interfaces

- Eight ATSC/Clear QAM tuners (dual 75 ohm F-type input connectors, each RF input feeds four tuners)
- Two 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis sockets, dual Ethernet features require AvediaStream c1210 chassis)
- Serial RS232 port for local administration (RJ-45 chassis socket)

## Streaming

- Single program MPEG-2 transport streams (ISO/IEC 13818-1)
- RTP
- UDP
- IP multicast
- IP unicast
- IGMP Join Group for enhanced switch compatibility
- 500 Mbps total output streaming

## Channel Management

- Channel announcement via SAP/SDP
- Interoperable with Samsung LYNK REACH 4 servers
- Configurable ATSC/ClearQAM scanning (basic and advanced modes)
- Stream specific channels from selected multiplexes
- Multicast/unicast address selection (automatic or manual)
- Configure name, number and group membership per channel
- Fine-grained control over audio, subtitles and other channel metadata using advanced PID filtering:
  - Create custom SPTS streams containing elements from a channel
  - Filters on PSI data, table types and PID number
  - Unlimited number of PIDs filtered

## Management

- Configurable using management tools:
  - Admin level management using AvediaServer Site Manager application
  - HTTP/HTTPS device web interface; recommended browser: Chrome®
- SNMP
- RESTful API
- Serial RS232 Admin Port
- Event logging via Syslog (local and remote)
- Firmware upgrade via TFTP
- Configuration backup/restore via TFTP

## RF Input

- Maximum data rate of 72Mbps per transport stream
- Input frequency range: 42-1002 MHz

## ATSC

- A/53Part2(2011)
- Input sensitivity:
  - -83 to -5dBm
- Signal modulation / coding:
  - 8 VSB
- Channel Bandwidth:
  - 6 MHz
- Code rate:
  - 2/3

## ClearQAM J.83B

- ITU-T J.83 v3.0
- Input sensitivity:
  - -68 to -5dBm (256 QAM)
- Signal Modulation / coding:
  - 64 QAM, 256 QAM
- Symbol Rates:
  - 5.056941, 5.360537, 5.6 Msym/s
- Roll off:
  - 0.12, 0.18

## System

- Linux-based

## Network

- Linux dual IPv4/IPv6 stack
- DHCP/DHCPv6 or Static IP addressing
- Two IEEE 802.3u 10/100/1000Mbps MDIX Ethernet Interfaces
- Ethernet redundancy - automatic switching to secondary Ethernet if network failure occurs (c1210 chassis required)

## Protocols

IP (RFC 791), UDP (RFC 768), TCP (RFC 793), ARP (RFC 826), DNS (RFC 1035), DHCP (RFC 2131), ICMP (RFC 792), IGMP v3 (RFC 3376), TFTP (RFC 1350), HTTP (RFC 2616), HTTPS (RFC 2818), Syslog (RFC 3164), NTP (RFC 1305), SAP (RFC 2974), SDP (RFC 4566), RTP (RFC 3550), SNMP (v1, v2c RFC 1901), IPv6 (RFC 8200), DHCPv6 (RFC 8415), SLAAC (RFC 4862), MLD (v2) (RFC 3810), NDP (RFC 4861), SSDP

## Regulatory

- CE:
  - IEC 62368-1: 2018 Edition 3.0
  - EN55032:2012
  - EN55024:2010
  - EN61000-3-2: 2006 +A1: 2009 + A2: 2009
  - EN61000-3-3: 2008
- UL/CSA:
  - UL62368-1:2019
  - CSA C22.2 No. 62368-1:19
- FCC:
  - 47CFR:2011 Part 15, Sub Part B
  - ANSI C63-4:2003
- ACMA:
  - AS/NZS 62368:2018

## Physical Format

- Modular hot-swap blade
  - AvediaStream c1101 (8 tuners)
  - AvediaStream c1103 (up to 24 tuners)
  - AvediaStream c1210 (up to 80 tuners)

## Environment

- Operating: 0 ...+40°C / +32 ... +104°F
- Storage: -20 ...+70°C / -4 ... +158°F
- Operating and storage Relative Humidity: 10-90% (non-condensing)

## Dimensions

- L: 275mm x W: 130mm x H: 40mm; weight 0.55kg

## Power

- DC 24V: 21W Typical, 31W Maximum

## MTBF

- Calculated to MIL-HDBK-217F, Notice 2: 43540 hours (5 years).

## In the Box

- AvediaStream g4448-us, octal ATSC/ClearQAM gateway
- F-type connector key
- Product Safety Brochure (hard copy)