

AvediaStream® Gateway

AvediaStream g4418 Gateway | avstr-g4418



The AvediaStream g4418 Gateway captures live TV and radio from satellite sources and streams them across an IP network. With eight inputs in a single blade, the g4418 combines low cost per channel with high reliability.

- High density product with eight x DVB-S/S2 RF tuners per blade for free-to-air TV or radio channels
- Streams both SD and HD channels simultaneously
- Advanced filtering to create duplicate channels (e.g. language specific), control bandwidth or provide data services such as EPG or MHEG data
- Single blade delivers maximum channel density for minimum rack space
- 4th generation Gateway technology gives improved RF performance, improved DVB-S2 symbol rate performance, high reliability and low power consumption (around 300 mW per channel depending on multiplexes used)
- Future-proof IPTV technology with support for 4K/Ultra HD/ HEVC broadcast streams

Interfaces

- Eight DVB-S/S2 tuners (dual 75 ohm F-type input connectors)
- Two 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis sockets, dual Ethernet features require the 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 servers
- Configurable DVB-S/S2 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

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)

RF Input

- Input connector: eight 75 ohm F-type
- Tuning range: 950 to 2150 MHz
- Input level: -25 dBm to -65 dBm
- Maximum data rate: 72Mbps per transport stream
- LNB supply: 100mA per RF input with Short circuit protection
- LNB voltage: 13 or 18V

Signal Modulation / Coding:

- DVB-S (ETSI EN 300 421 Broadcast services)
 - Modulation: QPSK: 1/2, 2/3, 3/4, 5/6, 7/8
 - Symbol rates: 1 to 45 MSymbols/s
 - FEC: Reed Solomon & Viterbi
 - Roll off: 0.35

- DVB-S2 (ETSI EN 302 307 Broadcast services)
 - Modulation: QPSK: 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
 - 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
 - Symbol rates: 1 to 45 MSymbols/s
 - FEC: LDPC & BCH
 - Roll off: 0.2, 0.25, 0.35
 - Diseq: 1.0, 1.1, 1.2
 - LNB supply: 100mA per RF input with Short circuit protection
 - LNB Voltage: 13 or 18V
- DiSEqC: 1.0, 1.1, 1.2

System

- Linux-based

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), SSDP, DHCPv6 (RFC 8415), SLAAC (RFC 4862), MLD (v2) (RFC 3810), NDP (RFC 4861)

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 inputs)
- AvediaStream c1103 (up to 24 inputs)
- AvediaStream c1210 (up to 80 inputs)

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: 22W Typical, 32W Maximum

MTBF

- Calculated to MIL-HDBK-217F, Notice 2: 35288 hours (4 years)
- A single g4418 is 2.5 times more reliable than the equivalent 3rd generation products (MTBF comparing 1 x g4418 versus 4 x g4310 in a c1210 chassis)

In the Box

- AvediaStream g4418, octal DVB-S/S2 gateway
- F-type connector key
- Product Safety Brochure (hard copy)