

AvediaStream g4415-vx TVgateway

The AvediaStream g4415-vx TVgateway receives content-protected live TV and radio from satellite sources and streams it securely across an IP network. With dual conditional access slots and built-in Verimatrix encryption, the g4415-vx meets the most stringent content protection requirements and delivers high value and broadcaster premium channels across your IP network.



Interfaces

- Two 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 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
- DVB Simulcrypt-based with Verimatrix as the CA provider
- AES-ECB stream encryption
- IGMP Join Group for enhanced switch compatibility
- Streaming output up to 500Mbps free to air or 80 Mbps encrypted

Channel Management

- Channel announcement via SAP/SDP
- Interoperable with Samsung LYNK SINC 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

- Fully integrated with Exterity management tools
- Network administration via SSH and SNMP
- HTTP web interface (supported browsers: Firefox, Internet Explorer and Chrome, check with support@exterity.com for version information)
- Serial RS232 Admin Port
- Event logging via Syslog (local and remote)
- Firmware upgrade via TFTP
- Configuration backup/restore via TFTP

RF Input

- Input connector: two 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: 350mA 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
- **DiSEqC: 1.0, 1.1, 1.2**

System

- Based on Linux 3.8

Network

- Linux IPv4 stack
- DHCP 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)

Regulatory

- CE:
 - EN55022:2010
 - EN55024:2010
 - EN61000-3-2: 2006 +A1: 2009 + A2: 2009
 - EN61000-3-3: 2008
 - IEC 60950-1:2005 (Second Edition) + Am 1: 2009 + Am 2:2013
 - EN 60950-1:2006 + A11:2009 +A1:2010 + A12:2011 + A2:2013
 - EN 303 372-2 V1.1.1
- UL/CSA/FCC:
 - UL60950-1/CSA C22.2 No. 60950-1, Second Edition. Rev. October 14, 2014
 - 47CFR:2011 Part 15, Sub Part B
 - ANSI C63-4:2003

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 616), Syslog (RFC 3164), NTP (RFC 1305), SAP (RFC 2974), SDP (RFC 4566), RTP (RFC 3550), SNMP (v1, v2c RFC 1901)

Physical Format

- Modular hot-swap blade for Exterity chassis
 - AvediaStream c1101 providing 2 inputs
 - AvediaStream c1103 providing up to 6 inputs
 - AvediaStream c1210 providing up to 20 inputs

Dimensions

- L: 275mm x W: 130mm x H: 40mm

Weight

- 0.55kg

Power

- DC 24V: 14W Typical, 17W Maximum

Environment

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

MTBF

- Calculated to MIL-HDBK-217F, Notice 2: 39228 hours (4.5 years)