

AvediaStream TVgateways



Datasheet (avstr-g4418)

AvediaStream g4418

Create

The AvediaStream g4418 TVgateway 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
- Exterity 4th generation TVgateway 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

AvediaStream TVgateway						
exterity						
Main Menu						
Status						
Check tuner status and view temperature and channel streaming information.						
Tuner Status						
Streaming	Multiplex	Lock	Signal Strength	Signal Quality	Cont Errs	UCB Errs
Tuner A	#1 474 MHz (Channel 21) Central Scotland		68.4dBuV	32.8dB	0	0
Tuner B	#16 498 MHz (Channel 24) Central Scotland		64.8dBuV	36.8dB	0	0
Tuner C	#17 522 MHz (Channel 27) Central Scotland		68.5dBuV	36.8dB	0	0
Tuner D	#18 546 MHz (Channel 30) Central Scotland		62.4dBuV	28.7dB	0	0
Tuner E	#19 570 MHz (Channel 33) Central Scotland		62.7dBuV	29.3dB	26	0
Tuner F	#20 618 MHz (Channel 39) Central Scotland		66.1dBuV	36.0dB	0	0
Tuner G	#21 642 MHz (Channel 42) Central Scotland		66.0dBuV	34.9dB	10	0
Tuner H	#23 498 MHz (Channel 24) Central Scotland		62.9dBuV	36.8dB	0	0
Reset Error Counts						



Technical Specification

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)

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

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

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: 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

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
- LNB supply: 100mA per RF input with Short circuit protection
- LNB Voltage: 13 or 18v

System

- CPU: Dual core Power Architecture e500v2 1.2Ghz
- RAM: 1GB
- Flash: 528MB (for firmware and configuration)
- OS: 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)

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), Syslog (RFC 3164), NTP (RFC 1305), SAP (RFC 2974), SDP (RFC 4566), RTP (RFC 3550), SNMP (v1, v2c RFC 190101)

Physical Format

Modular hot-swap blade for Exterity chassis

- AvediaStream c1101 providing 8 inputs
- AvediaStream c1103 providing up to 24 inputs
- AvediaStream c1110 providing up to 80 inputs
- AvediaStream c1210 providing up to 80 inputs

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

UL/CSA/FCC:

- 47CFR:2011 Part 15, Sub Part B
- ANSI C63-4:2003
- UL60950-1/CSA C22.2 No. 60950-1, Second Edition. Rev. October 14, 2014

Dimensions

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

Weight

- 0.55kg

Environment

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

Power

- DC 24V: 22W Typical, 32W Maximum

MTBF

- Calculated to MIL-HDBK-217F, Notice 2: 35721 hours (4.1 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)

TVgateway Comparison Table

	g4190	g4310	g4330	g4340	g4370	g4410	g4412	g4415 -SM	g4415 -LK	g4418	g4442	g4448	UCT xQIP (US)
DVB-C				✓							✓	✓	
DVB-C2											✓	✓	
DVB-T			✓	✓							✓	✓	
DVB-T2				✓							✓	✓	
DVB-S		✓				✓	✓	✓	✓	✓			
DVB-S2		✓				✓	✓	✓	✓	✓			
ATSC					✓								
Clear QAM					✓								✓
Encrypted QAM													✓
ASI	✓												
Content Protection								Secure Media®	Samsung LYNK™				
Tuners	1	2	2	2	2	2	2	2	2	8	2	8	6-60
CAM card slots							2	2	2		2		1-10 Cable CARDS