g4512 RF Gateway

Dual DVB-S/S2 and dual DVB-CI

The g4512 RF Gateway receives content-protected live TV and radio from satellite RF sources and streams them across an IP network. With dual conditional access slots, the g4512 descrambles and distributes content across your network.

Interfaces

• Two DVB-S/S2 tuners (two 75 ohm F-type input connectors)
• Two 802.3 10/100/1000BaseT Ethernet (RJ-45 chassis sockets, dual Ethernet features require c1210 Chassis)
• Serial RS232 port for local administration (RJ-45 chassis socket)
• Two DVB-CI interfaces accept professional and commercial CAMs
• Supports Mediaguard, Viaccess, Irdeto, Conax decrypting and more

Streaming

• Single program MPEG-2 transport streams (ISO/IEC 13818-1)
• RTP, UDP
• IP multicast
• IP unicast
• 500 Mbps total output streaming

Management

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

Features & Benefits

• Two DVB-S/S2 RF tuners per blade for free-to-air TV or radio channels

• Two DVB-CI CA slots for scrambled TV or radio channels

• Any stream codec and resolution support

• Advanced filtering to create duplicate channels (e.g. language specific), control bandwidth or provide data services such as EPG or MHEG data

• 5th generation RF Gateway technology delivers high reliability and optimised low power consumption

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

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

- Linux-based

Network

- Linux dual IPv4/IPv6 stack
- DHCP/DHCPv6 or Static IP addressing
- VLAN support for Admin and Streaming network segregation
- 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

Physical Format

- Modular hot-swap blade
  - c1101 Chassis (2 RF multiplex inputs)
  - c1103 Chassis (up to 6 RF multiplex inputs)
  - c1210 Chassis (up to 20 RF multiplex inputs)

Regulatory

- CE:
  - IEC 62368-1: 2018
  - EN55032:2015
  - EN55035:2017
  - EN61000-3-2: 2019
  - EN61000-3-3: 2013 +A1: 2019
- UL/CSA:
  - UL62368-1:2019
  - CSA C22.2 No. 62368-1:2019
- FCC:
  - 47CFR:2011 Part 15, Sub Part B
  - ANSI C63-4:2014
- Australia/New Zealand:
  - AS/NZS 62368:2018

Environment

- Operating Temperature: 0°C ~ 40°C (32°F ~ 104°F)
- Operating Relative Humidity: 10% ~ 90% (non-condensing)

Dimensions

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

Power

- DC 24V: 14W Typical, 20W Maximum

MTBF

- Calculated to MIL-HDBK-217F, Notice 2: 47089 hours (5.38 years)

In the Box

- g4512, dual DVB-S/S2 RF Gateway with dual DVB-CI slots
- Product Safety Brochure (hard copy)

Ordering Information (P/N)

- 18515 - g4512 - 2 tuner DVB-S2 & 2 and dual DVB-CI