

G8000

Integrated Receiver and Decoder



Product Overview

G8000 is the latest cost-effective Integrated Receiver and Decoder, and was designed to demodulate and descramble satellite broadcast services for DTV operators with limited budget.

It is equipped with two DVB-CI complied Common Interfaces to meet the demands of descrambling for different scrambled programs using different DVB SimulCrypt CA(s), and supports up to 140Mbps of de-scrambling output bit rates for SD, HD MPEG-2, MPEG-4 AVC and AVS broadcast services. It supports multiple decoding outputs, including composite & component video, analog balanced & unbalanced stereo audio, HDMI and SDI video & audio, digital audio over coaxial & optical outputs, it can be widely used for broadcast distribution applications.

Main Features

- DVB-S/S2 QPSK, 8PSK, 16APSK and 32APSK RF demodulation
- Universal MPEG-2, MPEG-4 AVC SD/HD/FHD, AVS video decoding
- MPEG-1/2 audio decoding, optional AAC, AC-3, E-AC-3 decoding
- Dual DVB-CI slots, supporting up to 16 descrambled of TV services
- Up to 72Mbps of descrambling bit rate each CAM
- Standard common interface complied with EN 50221
- Analog decoding: Composite & component video, Balanced & unbalanced audio
- Digital decoding: SDI, HDMI video & audio, AES coaxial & optical audio outputs
- Outputs resolutions: 480i (NTSC), 576i (PAL), 1080i, 720P, 1080P
- MPEG TS-over-UDP/RTP outputs, supporting SPTS and MPTS
- Supports remote Web-based management, control and software upgrades
- Dual DVB-ASI outputs
- Supports HD subtitle

Technical Specifications

DVB-S/S2 Satellite Input

Number of Inputs	1 x L-band Input
Connector Type	F-Type (Female, 75Ω)
Standards	DVB-S (EN 300 421) DVB-S2(EN 302 307)
Constellations	DVB-S: QPSK DVB-S2: QPSK/8PSK/16APSK/32APSK
Frequency Range	950MHz to 2150MHz
Input Signal Level	-65 to -25dBm
LNB Power Output	0V/+DC 13V/18V, I _{max} =400mA

ASI Output

Numbers of Interface	2 x ASI
Connector Type	BNC (Female, 75Ω)
Operation Mode	Duplicate outputs
Data Format	188 Bytes
Bit Rate	Up to 100Mbps output (72Mbps after descrambling)

IP Output

IP Interface	1 x 100/1000 Base-T Ethernet(RJ-45)
MPEG TS Format	7 x 188 Bytes
IP Encapsulation	MPEG TS-over-UDP/RTP
MPEG TS Mode	MPTS or SPTS
Operation Mode	TS Inputs and multiplexing outputs
Addressing	Unicast or Multicast
Protocol	UDP, RTP, ARP, IGMP, ICMP

DVB-CI & TS Descrambling

Numbers of DVB-CI	2 x CI Slots (front panel accessible)
Interface Type	PCMCIA Type II
CI Standard	Comply with EN 50221
Descrambling Mode	Independent and cascading
Rate of Descrambling	72Mbps per CAM
Performance	Up to 16 programs simultaneously
Supported CA Category	DVB SimulCrypt and MultiCrypt

Decoding Output

Analog Video Output

	3 x CVBS duplicate outputs
Composite Video	BNC female, 75Ω 480i, 576i
Component Video	1 x YPbPr, BNC female, 75Ω 480i, 576i, 720P, 1080i

Analog Audio Output

Unbalanced	2 x BNC female (R&L), 600Ω
Balanced	2 x XLR male (R&L), 110Ω

Digital Audio Output

AES Coaxial	2 x BNC female(R&L), 600Ω
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AES Optical	1 x Optical receptacle
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HDMI Output

Numbers of Interface	1 x HDMI 1.3 (Type A receptacle)
Video Resolution	480i, 576i, 1080i, 720P, 1080P

SDI Output

Numbers of Interface	1 x SDI (BNC female, 75Ω)
Interface Standards	SMPTE259M/292M/424M (SD/HD/3G-SDI)
Audio	Embedded Audio
Video Resolution	480i, 576i, 1080i, 720P, 1080P

Video & Audio Decoding

Video Decoding

Decoding Formats	MPEG-2 MP@HL, MPEG-4 ASP MPEG-4 AVC HP@L4.1, AVS 576i, 480i(PAL, NTSC, SECAM)
Resolution & Frame Rate	720P, 1080i, 1080P
Aspect Ratio	4:3 or 16:9

Audio Decoding

Decoding Standards	MPEG-1/2 Optional: AAC, AC-3 E-AC-3
Operation Mode	Stereo, mono and surround
Supported Sample Rate	32 kHz, 44.1 kHz, 48 kHz

Network Management

Interface	1 x 10/100 Base-T Ethernet
Connector	RJ-45
Management	Web management and control

Miscellaneous

Front Panel	Front panel LCD display and control LED status indication
Rear Panel	1 x Serial console port(RS-232) 1 x USB2.0 (for software upgrade)

Power Supply

Input Voltage	110 - 240 VAC, 50/60Hz
Power Consumption	20W (Typ.)

Environmental

Operating Temperature	0°C to 40°C(32°F to 104°F)
Storage Temperature	-20 to 70°C(-4°F to 158°F)
Operating Humidity	90%, non-condensing

Mechanical

Product Dimensions (W x H x D)	483mm x 44.5mm x 300mm 19" x 1.73" (1 RU) x 11.8"
Product Weight	3.5Kg (7.7 lbs)

Rear Panel View



Ordering Information

Hardware Options

Hardware Codes	Descriptions
G8000	Integrated Receiver and Decoder with 1 x L-band (DVB-S/S2) In, 2 x ASI Out, 1 x 100/1000Base-T(RJ-45) Out, 1 x 10/100Base-T Control Port, 3 x CVBS Out, 1 x YPbPr Out, 1 x Unbalanced Stereo Pair Out(R&L), 1 x Balanced Stereo Pair Out(R&L), 1 x HDMI Out, 1 x SDI Out, 1 x AES Coaxial & Optical Out, AC PSU
G8000-AAC	AAC audio decoding
G8000-AC-3	AC-3 audio decoding
G8000-E-AC-3	E-AC-3 audio decoding

For More Information

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