

## G8000B

### 4-Ch Integrated Receiver and Decoder



#### Product Overview

G8000B is the latest high cost-effective Integrated Receiver and Decoder, and was designed to demodulate and descramble multiple satellite broadcast services in 1RU.

It is equipped with four 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 280Mbps of de-scrambling output bit rates for SD, HD MPEG-2, MPEG-4 AVC and AVS broadcast services. It supports multiple digital decoding outputs from HDMI and SDI, It can be widely applied to DTV broadcast distribution headend with limited budget.

#### Main Features

- Up to four channels of DVB-S/S2 demodulation simultaneously
- Supports DVB-S/S2 QPSK, 8PSK, 16APSK and 32APSK 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
- Up to four DVB-CI slots, supporting 72Mbps of descrambling bit rate each CAM
- Standard common interface complied with EN 50221
- Supports HDMI and SDI digital decoding 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	4 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 <sub>max</sub> =400mA

### ASI Output

Numbers of Interface	4 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	4 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 32 programs simultaneously
Supported CA Category	DVB SimulCrypt and MultiCrypt

### Digital Decoding Output

#### 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
Resolution & Frame Rate	576i, 480i(PAL, NTSC, SECAM) 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
G8000B	Integrated Receiver and Decoder with 4 x L-band (DVB-S/S2) In, 4 x ASI Out, 1 x 100/1000Base-T(RJ-45) Out, 1 x 10/100Base-T Control Port, 1 x HDMI Out, 1 x SDI 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

Please visit our website: <http://www.gospell.com> or contact your local sales representative:

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