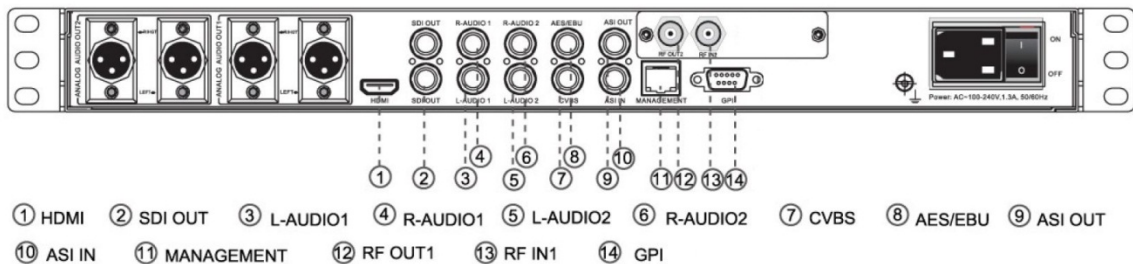


## DVB-S/S2 HD/SD INTEGRATED RECEIVER DECODER

Single channel IRD - Cost-effective solution



ABE "IRD5001/AW" is an Integrated Receiver Decoder that demodulates digital QPSK and 8PSK signals according to DVB-S and DVB-S2 specifications (for Broadcasting applications) in the "L band" (the standard IF output of an LNB – Low Noise Block downconverter) and decode the selected video / audio program according to MPEG-2 (4:2:0 – MP@ML) and MPEG-4 (H.264 HD/SD) standard giving digital (SDI with embedded audio) and analog outputs. It also support Conditional Access.

ABE IRD5001/AW has also a Transport Stream output (Multi-Program-Transport Stream) in ASI format and can also decode an ASI Transport Stream. As option, it can also have IP (Ethernet – GBE - Video over IP) input and output.

### Features

- DVB-S and DVB-S2 compliant for Broadcasting applications
- MPEG-4 AVC H.264 SD and HD decoding
- MPEG-2 (MP@ML) SD decoding
- N\*2 CAM Slots for Conditional Access
- HD/SD-SDI output interface with embedded audio
- AES/EBU digital audio output
- HDMI output interface
- Analog Video and audio outputs
- Transport Stream ASI Output and Input
- Optional GBE (Transport Stream Over IP) Ethernet input/output interface
- Data rate up to 72 Mbps
- Local control with front panel LCD and keypad
- Remote control LAN interface (RJ45)

## Technical specification

### RECEIVER SPECIFICATIONS

<b>Input level:</b>	Approx. -25dBm to -65dBm
<b>Input impedance and connector:</b>	"F" Female 75 ohm
<b>Input frequency:</b>	950 to 2150MHz with steps of 100KHz
<b>Supported modulations:</b>	QPSK and 8PSK according to DVB-S and DVB-S2 standard for Broadcast applications
<b>Symbol rate:</b>	1 to 45 M Symbol/ sec (according to modulation scheme)
<b>LNB power supply:</b>	0/ 13/ 18V polarity switching, 22KHz on/ off
<b>LNB current:</b>	350mA max

### VIDEO DECODER and OUTPUT

<b>Data rate:</b>	Up to 15Mbps
<b>Supported compressions:</b>	MPEG-2 (4:2:0 – MP@ML); MPEG-4 AVC H.264
<b>Supported resolutions:</b>	480i, 480p, 576i, 720p, 1080i
<b>Standard</b>	PAL, SECAM, NTSC
<b>Digital Video outputs:</b>	2x HD/ SD-SDI; 1x HDMI
<b>Analog video output (Standard Definition only) - level / impedance / connector:</b>	1Vpp / 75 ohms / "BNC" Female

### AUDIO DECODER and OUTPUT

<b>Supported decoding:</b>	MPEG-1 layer I, II
<b>Output format:</b>	Analog and Digital (AES/EBU; embedded in SDI)
<b>Output connector:</b>	XLR and BNC
<b>Audio mode:</b>	Dual Channel; Stereo, Dual mono and Mono

### DESCRIPTION – CONDITIONAL ACCESS

<b>Interface</b>	N°2 independent CI Slots (EN50221)
<b>CA Methods:</b>	Multicrypt, Simulcrypt, Hot Plug
<b>CAS</b>	Conax, Irdeto, Viaccess, Nagravision, CTI, DV-Crypt, Novel SuperTV, Verimatrix
<b>BISS 1/ E</b>	Supported

### ASI INPUT and OUTPUT

<b>Data rate:</b>	270Mbit/s (max Transport Stream bit rate: 72Mbit/s)
<b>Data packet format:</b>	188/ 204 Byte per T.S. (Input); 188Byte per T.S. (Output)
<b>Connector type:</b>	"BNC" Female 75 ohm

### GBE (T.S. over IP) INPUT and OUTPUT - OPTION

<b>Interface:</b>	10/100/1000 Mbps Base-T - RJ45 connector
<b>IP Encapsulation:</b>	MPEG Transport Stream over IP (as per Pro-MPEG Code of Practice #3 release 2)
<b>Broadcasting type:</b>	Unicast or Multicast; UDP/ RTP; unicast and multicast
<b>I/ O processing:</b>	Up to 12 sockets, max at 72 Mbps per socket
<b>Forward Error Correction</b>	Supported. ProMPEG

### GENERAL SPECIFICATIONS

<b>Power supply and consumption:</b>	90 to 260Vac, 50/60Hz. Approx. 40W
<b>Operating temperature and humidity:</b>	0° to 50°C ; <95%
<b>Housing and dimension:</b>	1RU (19") ; 480mm x 44mm x 440mm