

DEC-5001 Satellite Receiver-Decoder

Features

- Decodes HD or SD
- Decodes MPEG-2 or MPEG-4 AVC
- NTSC/PAL composite and SDI output
- HD-SDI, HDMI and analog HD output
- Analog, AES or HDMI embedded and SD/HD-SDI embedded audio output
- Input options ASI, DVB-S, DVB-S2, MPEG over IP
- Four audio channels
- MPEG, AAC audio decoding
- Full control front panel
- Remote control via SNMP, Web browser
- BISS 1 and E decryption
- Common Interface

The DEC-5001 DVB-S/S2 Satellite Receiver-Decoder provides operators an ideal solution for receiving, re-multiplexing, descrambling and decoding operations. A highly versatile unit, it is equipped with a variety of inputs that ensures compatibility with all transmission media.

The DEC-5001 is DVB-S/S2 compliant and designed to receive and decode HD and SD video with associated audio. This receiver is compatible with MPEG and IP transport streams.

Re-multiplexing

The DEC-5001 re-multiplexing capabilities enable the creation of new transport streams that are subsets of the original stream. Customized services may be output as multiple SPTS or MPTS over IP, as well as over ASI. The dual DVB common interfaces can decrypt multiple services in one or two transport streams.

Wide Variety of Inputs

L-band DVB-S or DVB-S2, IP-over-Ethernet or ASI input interfaces ensure ease of interfacing.

Professional Video Decoder

The decoder features a broadcast quality decoder for MPEG-2 and MPEG-4 AVC/H.264 in both Standard Definition and High Definition formats, and provides a variety of industry standard digital and analog outputs, including CVBS video, AES/EBU audio, analog audio, SD-SDI and HD-SDI. The unit also performs HD down-conversion and aspect ratio adaptation of HD programs to generate professional quality baseband analog video and audio outputs for easy integration with an existing cable network infrastructure.

Leading Edge Audio Decoding

Audio codecs included for MPEG1-LII, AAC-LC, HE-AAC V1 & 2 and more to ensure maximum audio interoperability. Audio output is available as analog, discrete digital or embedded in HDMI or SDI/HDSDI.



TECHNICAL SPECIFICATIONS—DEC-5001 Satellite Receiver-Decoder

MODEL	DESCRIPTION
Base Unit	<ul style="list-style-type: none"> • ASI, IP and 1 * DVB-S/S2 QPSK/8PSK RF inputs • Decodes 4:2:0 streams from HD or SD, MPEG-2 or MPEG-4 • MPEG, AAC-LC and HE-AAC V1 & 2 audio decoding • Video outputs: Analog composite or SDI in SD mode, or HD-SDI, HDMI and YPrPb in HD mode • Audio outputs: Analog, Digital, HDMI/SDI/HD-SDI embedded
Advanced Features	
TS Input Management	Demux and Remux among Tuner, ASI and TS/IP Inputs
TS Output Management	Demux and Remux for 2 independent ASI outputs
Service and PID Management	Remux, filtering and remapping
Redundancy Port	Among Tuner, 2 x ASI inputs and TS/IP
Switching Condition	TS Sync Loss or PAT Loss

INPUT INTERFACES	
L-band Tuner Input	1xF type female 75Ω for Input, 1 x F type, female 75Ω for loop through output
DVB-S/DVB-S2 Demod	<ul style="list-style-type: none"> • DVB-S (QPSK, 2 to 45 Msps) • DVB-S2 (QPSK, 2 to 45 Msps) • DVB-S2 (8PSK, 2 to 45 Msps) • Frequency 950 to 2150 MHz
LNB Polarity Selection Voltage	0, 13V, 18V selectable
IP Input Interface	1xRJ-45, 10/100 Base-T or 100/1000 Base-T for TS/IP UDP / RTP, Multicast / Unicast, IGMPv2, ARP
ASI Input	2x BNC female, 75Ω, < 198 Mb/s
ASI Output	2 pairs of BNC female
VIDEO CAPABILITIES	
Video Processing	<ul style="list-style-type: none"> • MPEG-2(MP@ ML for SD, MP@HL for HD) • MPEG-4/H.264 AVC Part 10 (MP@L3 for SD, HP@L4.1 for HD)
Input Video Resolution	1080i 30 1080i 29.97 1080i 25 720p 60 720p 59.94 720p 50 576i 25 480i 29.97
Digital Video Output	<ul style="list-style-type: none"> • SD-SDI (SMPTE 259M, 270 Mb/s, 10bit, BNC75Ω) • HD-SDI (SMPTE 292M, 1.485 Gbit/s, 10bit, BNC 75Ω) • HDMI 1.3 (up to 1080i)
Analog Video Output	<ul style="list-style-type: none"> • 1x Composite Analog NTSC (525) or PAL (625) • 1x RCA female, 75Ω • YPrPb on 3*RCA
VBI Data	<ul style="list-style-type: none"> • Closed Captioning EIA 608, EIA 708, EIA 608-to-708
Data Output	<ul style="list-style-type: none"> • RS232 Asynchronous Data, D-sub 9 female

AUDIO CAPABILITIES	
Audio Processing (2 Pairs)	<ul style="list-style-type: none"> • MPEG-1-LII • AAC-LC • HE-AAC V1 and V2
Audio Outputs	<ul style="list-style-type: none"> • SD-SDI / HD-SDI embedded • AES/EBU on XLR • Analog audio on XLR • HDMI embedded audio • Analog audio on RCA
FRONT PANEL INDICATORS	
Rugged push buttons, illuminated LCD	
CONDITIONAL ACCESS	
BISS Modes 1 and E	
ALARM, STATUS AND CONTROL INTERFACES	
<ul style="list-style-type: none"> • Embedded Web browser interface for command and control • SNMP • Fully functional front panel control • Alarm relay (same D-sub 9 female as RS232 Data Port, pin 9): 0V (Alarm), 5V (OK), for monitoring audio and video decoding error 	
POWER REQUIREMENTS	
Supply Voltage	AC 90V ~ 260V, 50/60Hz
Power Consumption	24 Watts (typical, excludes LNB power)
PHYSICAL PARAMETERS	
Chassis	1RU rackmount
Dimensions (H, W, D)	4.5 cm x 42.6 cm x 32.5 cm (1.75" x 16.8" x 12.8")
Weight	5.4 kg (11.9 lbs.)
ENVIRONMENTAL CONDITIONS	
Operating Temperature	0° to 45° C (32° to 113° F)

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Datasheet version #3, updated November 2015

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