

# SD2900 Challenger USB for Satellite



- 1x Smart Card Interface for Conax Embedded
- Blind Scan
- Max. 5000 Channels. (TV & RADIO Programmable) and 100 Satellites programmable
- DiSEqC Support Level 1.0, 1.1, 1.2 and 1.3(USALS)
- Multi-Picture Function of (4, 9, 13 or 16) Picture
- SDRAM 128MB
- SHARP Tuner build-in
- MPEG-2 Digital & Fully DVB Compliant.
- SCPC & MCPC Receivable from C/Ku-Band
- Program search in automatic, advanced and N.I.T (Network Information Table) Search
- Backup & Recovery programmable of Channel List (Backup/Recovery)
- Support of Teletext and Subtitling
- Variable Languages OSD Menu (Russia, German, English and more)
- Aspect Ratio for 4:3, 16:9 and Letterbox
- Games
- Power On/Off Switch
- Digital Audio 5.1
- S/PDIF Digital Audio output(Coaxial)
- Support subtitle and Teletext by VBI insertion & OSD Engine
- 2 x Scart (TV/VCR)
- 2 x Cinch Audio output (R/L)
- 1 x Cinch Video output
- USB 2.0 Interface Support (MP-3 player support, JPEG Photo Album, Easy software download)
- Software transfer from Receiver to Receiver
- VFD (Alphanumeric display)
- Blur display
- Software upgrade via USB
- VFD (Alphanumeric display)
- Touch screen
- RF Modulator

# SPECIFICATION

## 1. TUNER

Input Connector	1 X F type with Loop through
Output Connector	1 X F type 75 ohm, to connect an analog receiver
Frequency Range	950MHz to 2150MHz
Input Impedance	75 ohm
Signal Level	-25dBm ~ -65dBm
LNB Power & Polarization	Vertical +13.0V ~ +14.0V Horizontal +18V ~ +18.9V
22kHz Tone	Frequency 22KHz +/-20% Amplitude 0.6Vp-p +/-0.2Vp-p
Demodulation	QPSK
Input Symbol Rate	2~42Msps
FEC Decoder	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

## 2. MEMORY

Flash Memory	2Mbytes
SDRAM	16Mbytes

### 3. MPEG Transport Stream A/V Decoding

Transport Stream	MPEG-2 ISO/IEC 13818 Transport Stream Specification
Profile & Level	MPEG-2MP @ ML
Input Data Rate	15Mbit/s Max
Video Resolution	720 X 576(PAL), 720 X 480(NTSC)
Audio Decoding	MPEG-1 Audio Layer 1,2
Audio Mode	Stereo, Dual Channel, Joint Stereo, Mono
Sampling Rate	44.1 and 48KHz

### 4. A/V & Data In/Out

SCART	For TV
CVBS Video Out	RCA X 1
S/PDIF	Optical
Data Interface	RS232C, Baud Rate 115200, 9 Pin D-Sub

### 5. RF-Modulator

RF-Connect	75 ohm, IECI169-2, Male/Female
Frequency	470MHz to 860MHz
Output Channel	CH21~69
TV Standard	PAL-G, PAL-M, PAL-I, PAL-K and NTSC/M AUTO

### 6. POWER SUPPLY

Input Voltage	AC90~250V, 50/60Hz
Type	RCC Type
Power Consumption	25W Max.
Protection	Separate Internal Fuse and Chassis Grounding. The input shall have lightning or electric shock protection.

### 7. Physical Specification

Size(WxHxD)	270mm X 55mm X 200mm
Weight	About 2.52Kgs

### 8. Environment

Operating Temperature	+/-0°C ~ +50°C
Storage Temperature	-20°C ~ +65°C