

SUNNISKY TS2000-S2 Digital Multi-function DVB-S2 Satellite Processor & One way Gateway for DVB-TS over IP

Based on open standards, SUNNISKY TS2000-S2 is one digital multi-function DVB-S&DVB-S2 satellite processor with high level in technology and its application. Supporting MPEG-2 decoding, it can effectively receive DVB-S&DVB-S2 digital satellite TV signal, decode and output two ways independent TS stream signal simultaneously via its two ASI outputs interface, specially it has IP output port which could process the DVB-TS over IP application which enables multiple TS stream signal feed to be carried over a IP network (6 TV programs as default, and 32 TV programs as Optional), besides analogue CVBS signal and 1 group analogue Left/right audio balance output with XLR interface (as default, Digital Audio AES/EBU output as Optional), two digital SDI outputs embedded audio signal.

Specially, by aid of its one ASI Input interface it has cascade (simply Re-multiplexer) function (need to be activated), the demodulating of QPSK, and generating TS signal by itself and the input TS signal from its ASI input interface, which comes from the other equipment, will be multiplexed and filtered out unwanted service/TV programs into only one MPTS TS signal output and IP output at the same time.

SUNNISKY TS2000-S2 has embedded Common Interface which could provide great support for a wide variety of CA systems, for example, Conax, CryptoWorks, Irdeto, Mediaguard, Nagravision and Viaccess, etc. That is, it could receive encrypted DVB-S&DVB-S2 digital satellite TV programs with the help of one Smartcard and PCMCIA CI module which has the function of multi-decryption, in order to decrypt them as free TS stream signal.

With 10/100BaseT Ethernet, the SUNNISKY TS2000-S2 could realize remote control and management function by aid of its NMS (network management software system, as Optional). And being adopted the latest technology in DVB (digital video broadcasting) and IP, and it is specially designed for digital cable or terrestrial TV system and IPTV network for all of worldwide operators in order to realize the triple play service including real-time video, voice and data over digital TV and IP network infrastructure with increased flexibility.



Feature

- Fully comply with DVB-S&DVB-S2 standard and MPEG-2 (MP@ ML) standard
- Support SD and HD digital satellite TV signal receiving
- Linux Operating System, and ARM7 MCU
- C&Ku band satellite
- Decrypts the conditional access systems encrypted, for example, Conax, CryptoWorks, Irdeto, Mediaguard, Nagravision and Viaccess CA, etc. with the two CI slots of PCMCIA
- Two CI slots of PCMCIA modules could work and descramble multi-program stream simultaneously (under the condition of multiple TV programs in one satellite transponder)
- Multi-descramble function together with PCMCIA module which could support multi-descramble
- BISS function
- Support VBI teletext (DVB ETSI 300 706) EBU and DVB subtitle
- NIT search
- PMT update automatically
- PID filtering
- PSI/SI edit and generate
- One ASI input interfaces, the function of Re-Multiplexing, and realize the function of one way Gateway for DVB-ASI over IP
- Two independent TS stream signal outputs via two ASI ports with scrambled or non-scrambled stream
- Two ways Digital SDI video output ports embedded audio (need to be activated)
- Composite video (CVBS) output besides R/V, G/Y and B/U output
- 1 group analogue Left/Right audio balance output with XLR interface (as default, Digital Audio AES/EBU output as Optional)
- DVB-TS over IP output with bit rate up to 70Mbits/s by 100M base-T

- Support UDP (User Datagram protocol) , and RTP
- IP transmission supports Unicast, Multicast modes (6 IP addresses-100Mbps Base-T as default, and 32 IP addresses-1000Mbps Base-T as Optional)
- Running continuously with excellent stability
- LCD display and user friendly operation
- Automatic recovery for latest system configuration due to expected or unexpected power off
- By 10/100BaseT Ethernet based on TCP/IP (optional), SNMP protocol, it can realize remote control, network management and parameters setup
- Software upgrade or link the other one to update via RS232 serial port

Specification

TUNER	
LNB Input and Output	Loop through
Input frequency	C/Ku band, 950~2150MHz
Input level	-25dBm~-65dBm
Input impedance	F type, 75Ω
LNB Power	14V/18V (max.400mA), Short Circular Protection
Tone Switch	0/22KHz for universal LNB
Channel Decoding	
Complies with	DVB-S&DVB-S2 standard
Demodulation	DVB-S:QPSK; DVB-S2: QPSK/8PSK
FEC Decoder	DVB-S2 QPSK: 1/2,3/5,2/3,3/4,4/5,5/6,8/9,8/10; DVB-S2 8PSK: 3/5,2/3,3/4,5/6,8/9,9/10; DVB-S: 1/2,2/3,3/4,5/6,6/7,7/8
Rolling Off Factor	0.35 for DVB-S; 0.2 for DSS; 0.35, 0.25, 0.2 for DVB-S2
Symbol rate	5~ 45Msps for QPSK; 10~31Msps for 8PSK
Demultiplexer	
Standard	ISO/IEC 13818-2
Video decoding	
Standard	ISO/IEC 13818-2; MPEG-2 MP@ML
Aspect ratio	4:3 and 16:9 Full; 4:3 Letterbox
Video format	720X576@ PAL; 720X480 @NTSC
Audio decoding	
Standard	ISO/IEC 13818-3 MPEG-1 layer I and II
Decoding	MPEG-1 layer I and II, Musiacam Compression Format
Audio output mode	Stereo, Left, Right, Mono channel
Volume Level	32 Levels
Common Interface	
Standard	EN 50221
CI Module	JEIDA 4.0 PCMCIA type II*2
Support	Conax, CryptoWorks, Irdeto, Mediaguard, Nagravision and Viaccess CA, etc.
IP (DVB-ASI over IP) output	
Connector	RJ45,10M/100Mbps Base-T
Output bit rate	70Mbits/s (Max.)
UDP/RTP mode	Multicast or Unicast
Multicast control protocol	IGMP V2
ASI-TS input	
Interface	BNC connector*1, 75Ω
Signal level	800mVp-p
TS input available bit rate	≤160Mbps

Packet length	188 or 204
Data mode	Byte
ASI-TS output	
Interface	BNC connector*2, 75Ω
Output level	1Vp-p±0.1V
Data transmission rate	270Mb/s
Packet length	188 or 204
Data mode	Byte
BNC Video Output	
Connector	BNC, 75Ω
Video output bandwidth	8MHz
Amplitude frequency response	±5%
Non Linearity	<6%
RCA Video and Audio Output	
Video output Connector	CVBS RCA*1, 75Ω
Video output level	1Vp-p
Audio output Connector	Audio RCA*2 (Left & Right) ; Low impedance,680Ω;
Audio XRL Balance Output	
Connector	XLR L*1, XLR R*1
Audio output level	0.6V rms/2dB into 10KΩ
Audio output impedance	600Ω
Digital Audio AES/EBU (Optional)	
Connector	9-pin D-sub male*2
SDI Output	
Connector	BNC*2, 75Ω
Data transmission rate	270Mb/s (Max.)
Max. output level	800mVp-p±10%
RS-232	
Connector	9-pin D-sub male, Maximum of 625K bits/s
General	
Power supply	SMPS, 90V~240V AC @ 50Hz~60Hz, 25W
Dimension	483mm×255mm×45mm
Weight	4.6Kg

Note: All specifications are subject to change without notice.



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