SUNNISKY TS2000IP Digital Multi-function IP Processor & Bi-directional One way Gateway for DVB-ASI over IP or IP over DVB-ASI

Based on open standards, with high level in technology and its application SUNNISKY TS2000IP digital multi-function IP processor & Bi-directional one way gateway for DVB-TS over IP or IP over DVB-TS could support MPEG-2 decoding. It can work under two modes:

➢ As one way gateway for DVB-TS over IP, by aid of the technologies of DVB-TS over IP digital conversion and DVB-CI decrypting, it could convert the input TS signal via its one ASI input interface into one IP stream signal which then is PID filtered out unwanted service/TV programs (6 TV programs as default, and 32 TV programs as Optional) to its one IP output port over IP wideband network, besides analogue CVBS signal (working as ASI-TS professional decoder) and 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.
If to select one from DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV RF receiving and demodulation module, after its MUX (Re-multiplexer) function has activated, the demodulating of DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV signal, then generating TS signal by itself and the input TS signal via its one ASI input interface, which comes from the other equipment, will be multiplexed and PID filtered out unwanted service/TV programs (6 TV programs as default, and 32 TV programs as Optional) to its one IP output port over IP wideband network, also output two ways independent TS stream signals simultaneously via its two ASI outputs interface.

➢ When it is activated as one way gateway for IP over DVB-TS, by aid of the technologies of IP over DVB-TS digital conversion and DVB-CI decrypting, it could convert the input IP signal via its one IP input port into one TS stream signal which then is PID filtered out unwanted service/TV programs (6 TV programs as default, and 32 TV programs as Optional) to its two ASI output ports over various of digital TV headend systems, besides analogue CVBS signal (working as IPTV professional decoder) and 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.
If to select one from DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV RF receiving and demodulation module, after its MUX (Re-multiplexer) function has been activated, the demodulating of DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV signal, then generating TS signal by itself and being converted into TS signal from input IP signal via its one IP port, will be multiplexed as one ASI-MPTS (multiple program transport stream) signal, then PID filtered out unwanted service/TV programs (6 TV programs as default, and 32 TV programs as Optional) its two ways independent TS stream signals simultaneously via its two ASI outputs interface.

SUNNISKY TS2000IP 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 IPTV signal (as gateway for IP over DVB-TS) via its one IP input port and TS signal via its one ASI input interface 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 to output.

SUNNISKY TS2000IP is one best device of signal format conversion and transmission with the strongest function; Working as one gateway for IP over DVB-TS, it could be applied in the field of various of digital TV headend systems; Specially working as one gateway for DVB-TS over IP, with the best economical and flexible, it could directly transmit DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV signal into IP wideband network; So it is one important device in order to realize the service of the triple play over digital TV and IP network infrastructure with increased.

Feature
- Fully comply with MPEG-2（MP@ ML）standard

- Support UDP (User Datagram protocol) **,** and RTP
- Support the bi-directional transmission between DVB-TS and IP, DVB-TS over IP or DVB-TS over IP
- IP transmission supports Unicast, Multicast modes
- As one way gateway for DVB-ASI over IP, 6 Multicast IP addresses-100Mbps Base-T (as default, and 32 IP addresses-1000Mbps Base-T as Optional) output
- Support SD and HD digital satellite TV signal receiving
- Linux Operating System, and ARM7 MCU
- Selectable one from DVB-S/S2 satellite or DVB-C QAM or DVB-T COFDM terrestrial DTV RF receiving and demodulation module (Before order it, need to confirm which one is selected)
- 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 for DVB-S/S2 satellite DTV module or in one RF Frequency/Channel for DVB-C QAM and DVB-T COFDM terrestrial DTV or in one IP addresses for one way IP over DVB-TS gateway)
- Multi-descramble function together with PCMCIA module which could support multi-descramble
- NIT search
- PMT update automatically
- PID filtering
- PSI/SI edit and generate
- One ASI input interfaces, the function of Re-Multiplexing (need to be activated), and realize the function of one way Gateway for DVB-TS 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)
- 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

Demultiplexer	
Standard	ISO/IEC 13818-2
Video decoding	
Standard	ISO/IEC 13818-2; MPEG-2 MP@ML
Aspect radio	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 (IP over DVB-TS) input	

Connector	RJ45,10M/100Mbps Base-T
Output bit rate	44Mbits/s (Max.)
UDP/RTP mode	Multicast or Unicast
Multicast control protocol	IGMP V2
SPTS/MPTS	Support
FEC	Pro-MPEG Cop3v2
IP（DVB-TS 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.