

Overviews

HDP1000 is a flexibly modularized 1U device with the features of Encoder/Receiver, IP Gateway and IPTV Server for the protocol-conversion application and IPTV-system application. It can get max 3 pluggable streamer cards embedded, such as encoder card and tuner card to receive the HDMI signals and tuner signals etc. It can also convert the input IP streams from the embedded modules and Ethernet ports over SRT, HTTP, UDP, RTP, RTSP, HLS protocol and TS files into the output IP streams over SRT, HTTP, UDP, RTP, RTSP, HLS and RTMP protocol. It is also integrated with HONDAO IPTV management software and Streamer cards to make it ideal in an IPTV system, such as hotel, hospital and community.



Feature

- Encoder/Receiver, IP Gateway and IPTV Server in one device
- 2 separate Web GUI, one for Cards and Gateway, the other for IPTV Server
- 4 Ethernet ports(GE), customized Ethernet port setting is available
 - ETH0: IP output over SRT, HTTP, UDP (SPTS), RTP, RTSP, HLS and RTMP
 - ETH1&2: IP input over SRT, HTTP, UDP (SPTS), RTP (SPTS), RTSP and HLS
 - ETH3: Web Management Port
- Support uploading TS files directly in Web GUI to broadcast your own channels
- Support inter-cut feature of a live program, a TS file and a picture
- Support IP anti-jitter feature for the external IP streams
- IPTV Features: Live channel, VOD, Hotel intro, Dining, Hotel service, Scenery intro, APPS, Adding scrolling caption, welcome words, pictures, advertisement, video, music etc (the features are only applicable to IP out application in the STB/Android TV installed with HONDAO IPTV APK)

Feature

- Support downloading HONDAO IPTV APK directly in the Web GUI
- It is closely related with the program bitrate and protocol type etc for Max program numbers involved in protocol conversion, and the actual application shall prevail with maximum 80% CPU utilization (Please refer to Test data for reference in the end of the spec)
- It is closely related with the program bitrate and protocol type etc for Max affordable terminal numbers in IPTV application of the STB/Android TV installed with HONDAO IPTV APK, and the actual application shall prevail with maximum 80% CPU utilization (Please refer to Test data for reference in the end of the spec)
- Multi-level password control for your system security
- LCD/Key button for Network-Setting checking
- Modularized design, max 3 cards embedded, a flexible option as per the actual application

Specification

Item	Paramet	
Input	IP inputs thru ETH 1&2, GE ports over SRT,HTTP, UDP(SPTS), RTP(SPTS), RTSP (over UDP, payload: mpeg TS) and HLS	
	TS files uploading through Web management	
	Encoder card and Tuner card etc (Please refer to the detailed card spec below)	
IP output	IP outputs thru ETH0, GE port over SRT, HTTP (Unicast), UDP(SPTS, Multicast) , RTP, RTSP, HLS and RTMP (Program source should be H.264 and AAC encoding)	
System	Channel switching time with HONDAO' STB: HTTP (1-3s), HLS (0.4-0.7s)	
	It is closely related with the program bitrate and protocol type etc for Max program numbers involved in protocol conversion, and the actual application shall prevail with maximum 80% CPU utilization (Please refer to Test data for reference in the end of the spec)	
	It is closely related with the program bitrate and protocol type etc for Max affordable terminal numbers in IPTV application of the STB/Android TV installed with HONDAO IPTV APK, and the actual application shall prevail with maximum 80% CPU utilization (Please refer to Test data for reference in the end of the spec)	
	IPTV Features: Live channel, VOD, Hotel intro, Dining, Hotel service, Scenery intro, APPS, Adding scrolling caption, welcome words, pictures, advertisement, video, music etc (the features are only applicable to IP out application in the STB/Android TV installed with HONDAO IPTV APK)	
General	Demission	482mm×464mm×44mm (WxLxH)
	Temperature	0~45℃(operation), -20~80℃(storage)
	Power Supply	AC100V±10%, 50/60Hz or AC 220V±10%, 50/60Hz

Specification

Available Card Specification (more available cards later for development)

HD902A 2 Tuner Descrambling Card			
Stream in:	2 Tuner input, F Type		
Stream out	16 SPTS output over UDP/RTP		
DVB-CI:	2 independent common interface slots		
Standard:	DVB-S	Input Frequency	950-2150MHz
		Symbol Rate	QPSK 1~45Msps
		Signal Strength	-65~ -25dBm
		FEC Demodulation	1/2, 2/3, 3/4, 5/6, 7/8
	DVB-S2	Input Frequency	950-2150MHz
		Symbol Rate	QPSK/8PSK 1~45Msps 16APSK 1~45 Msps 32APSK1~32 Msps
		FEC Demodulation	1/2,2/3,3/4,5/6,7/8, 4/5,5/6,8/9, 9/10
	DVB-S2X	Input Frequency	950-2150MHz
		Symbol Rate	QPSK/8PSK/16APSK 0.5~45 Msps 8APSK/32APSK: 0.5~40Msps
		FEC Demodulation	QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10, 23/36, 25/36, 13/18 8APSK: 5/9-L, 26/45-L 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10,1/2-L, 8/15-L, 5/9-L, 26/45,3/5,3/5-L, 28/45, 23/36, 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 2/3-L, 32/45, 11/15, 7/9
Support Diseqc function			
Multiplexing:			
Maximum PID Remapping:	256 output pids		
Function:	PID remapping (automatically or manually), Accurate PCR adjusting, generate PSI/ SI table automatically		
CAM/CI Quantity:	2		
BISS Mode:	Mode 1, Mode E; 32 BISS Keys		

Specification

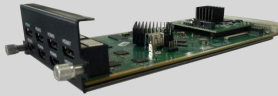
Available Card Specification (more available cards later for development)

HD942A 4 frequencies Descrambling Card			
Stream in:	4 frequencies input (each RF in interface for 2 frequencies locking), F Type		
Stream out	16 SPTS output over UDP/RTP		
DVB-CI:	2 independent common interface slots		
Standard:	DVB-C (J.83 A/C); J.83B	Input Frequency	60MHz~890MHz
		Symbol Rate	1000~9000Ksps
		Constellation:	16/32/64/128/256 QAM; 64/256 QAM for J.83B
	DVB-T/T2	Input Frequency	60MHz~890MHz
		Bandwidth:	5/6/7/8M bandwidth
	PLP supported for DVB-T2		
ISDB-T		Input Frequency	60-890MHz
Support Diseqc function			
Multiplexing:			
Maximum PID Remapping:	256 output pids		
Function:	PID remapping (automatically or manually), generate PSI/ SI table automatically		
CAM/CI Quantity:	2		
BISS Mode:	Mode 1, Mode E; 32 BISS Keys		
HD908 8 FTA DVB-S/S2/S2X Tuner Card			
Stream in:	8 Tuner input, F Type		
Stream out	512 SPTS out over UDP/RTP/RTSP, Unicast/Multicast		
Tuner input:	DVB-S/S2/S2X		
Symbol rate:	QPSK/8PSK/16APSK 0.5~45 Msps; 8APSK/32APSK: 0.5~40Msps		
Input Frequency:	950-2150MHz		
Standard:	DVB-S	Constellation:	QPSK
		FEC Demodulation:	1/2, 2/3, 3/4, 5/6, 7/8
	DVB-S2	Constellation:	QPSK/8PSK/16APSK/32APSK
		FEC Demodulation:	QPSK: 1/2, 2/3, 3/4, 5/6, 3/5, 4/5, 8/9, 9/10
			8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10
			16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
	DVB-S2X		32APSK: 3/4, 4/5, 5/6, 8/9, 9/10
		Constellation:	QPSK/8PSK/8APSK/16APSK/32APSK

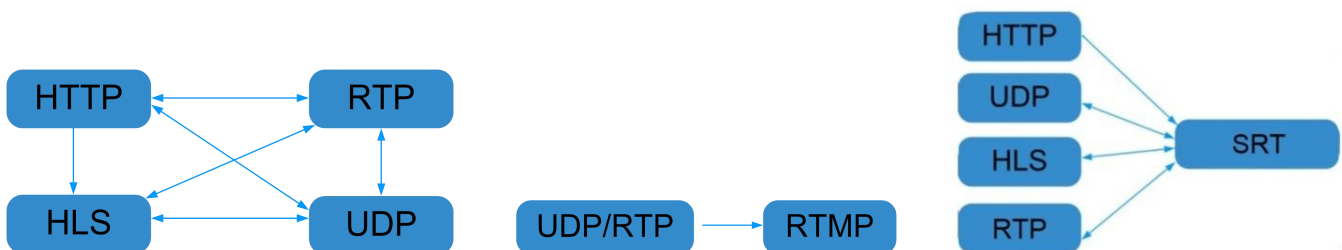
Specification

			QPSK: 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10, 13/45, 9/20, 11/20 8PSK: 3/5, 2/3, 3/4, 5/6, 8/9, 9/10, 23/36, 25/36, 13/18 8APSK: 5/9-L, 26/45-L 16APSK: 2/3, 3/4, 4/5, 5/6, 8/9, 9/10,1/2-L, 8/15-L, 5/9-L, 26/45, 3/5, 3/5-L, 28/45, 23/36, 2/3-L, 25/36, 13/18, 7/9, 77/90 32APSK: 3/4, 4/5, 5/6, 8/9, 2/3-L, 32/45, 11/15, 7/9, 9/10	
Support Diseqc function				
Multiplexing:				
Maximum	PID	256 output pids		
Remapping:				
Function:		PID remapping (automatically or manually), generate PSI/ SI table automatically		
BISS Mode:		Mode 1, Mode E; up to 120Mbps, 32 BISS Key		
HD908 8 FTA DVB-S/S2/S2X Tuner Card				
Stream in:		8 Tuner input, F Type		
Stream out		512 SPTS out over UDP/RTP/RTSP, Unicast/Multicast		
Standard:	DVB-C (J.83 A/C); J.83B	Input Frequency:	60MHz~890MHz	
		Symbol rate:	1000~9000Ksps	
	DVB-T/T2	Constellation:	16/32/64/128/256 QAM; 64/256 QAM for J.83B	
		Frequency In:	60MHz~890MHz	
	ISDB-T	Bandwidth:	5/6/7/8M bandwidth	
		Input Frequency:	60-890MHz	
Support Diseqc function				
Multiplexing:				
MaximumPID Remapping:		256 output pids		
Function:		PID remapping (automatically or manually), generate PSI/ SI table automatically		
BISS Mode:		Mode 1, Mode E; up to 120Mbps, 32 BISS Keys		

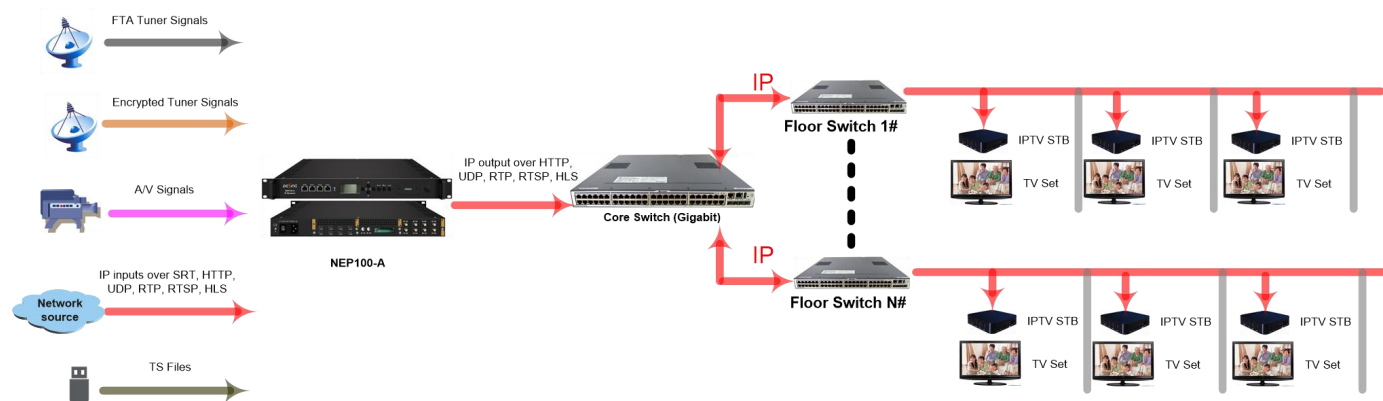
Specification

HD228S 8 HDMI Encoder Card	
Input:	8*HDMI
Output:	8*SPTS output over UDP/RTP/RTSP, Unicast/Multicast
Video format:	MPEG-4 AVC/H.264
Input resolution:	1920 × 1080_60P, 1920 × 1080_60i, 1920 × 1080_50P, 1920 × 1080_50i, 1280 × 720_60P, 1280 × 720_50P, 720 × 576_50i, 720 × 480_60i, Output resolution: 1920 × 1080_30P, 1920 × 1080_25P, 1280 × 720_30P, 1280 × 720_25P, 720 × 576_25P, 720 × 480_30P
GOP structure:	IP...P (P Frame adjustment, without B Frame)
Video Bit-rate:	1Mbps~13Mbps each channel
Rate Control:	CBR/VBR
Audio format:	MPEG1 Layer II, LC-AAC, HE-AAC and AC3 Pass through, support audio gain adjustment
Sampling rate:	48 KHz
MPEG-1 Layer 2:	48/56/64/80/96/112/128/160/192/224/256/320/384 kbps
LC-AAC:	48/56/64/80/96/112/128/160/192/224/256/320/384 kbps
HE-AAC:	48/56/64/80/96/112/128 kbps

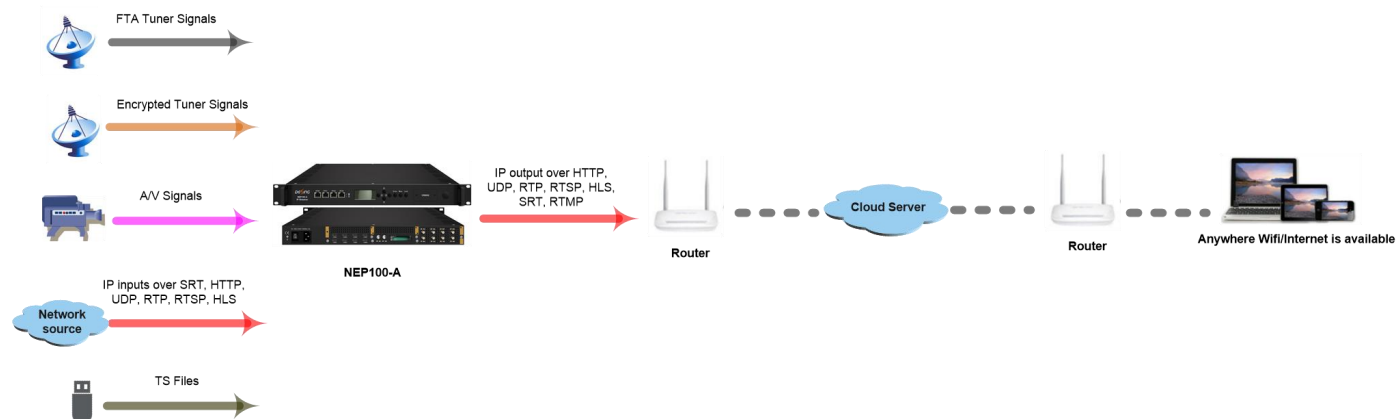
IP Protocol Conversion (example)



IP Protocol Conversion (example)



IPTV System as a Server



Protocol Conversion as a Streamer



We produce a wide selection of network equipment under HONDAO brand. Gather thousands of products, which are supplier to customs of different filed and different requirement. QC team test all goods before shipment. We screen the Chinese supplier in a search of the most efficient product solutions available to satisfy your individual needs.