

WDH-5700EC

Single Channel H.264 HD Encoder



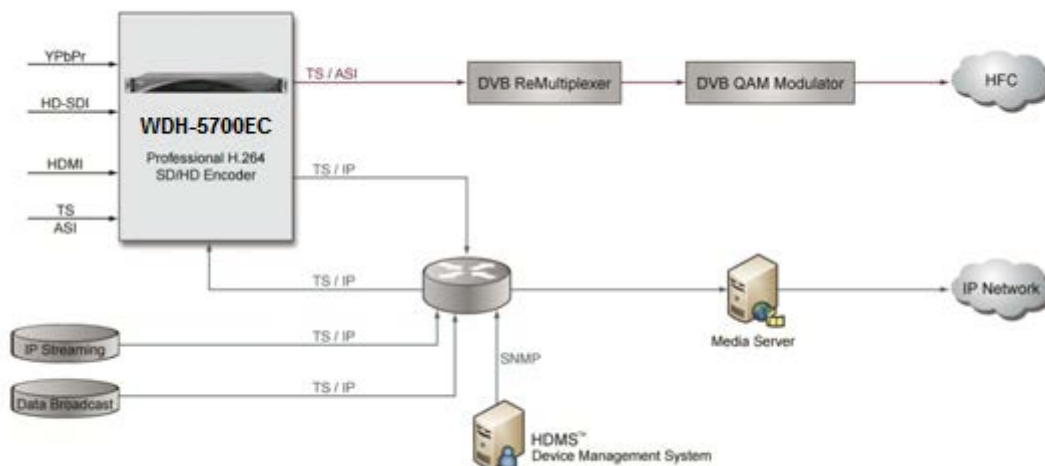
The WDH-5700EC is a high quality single channel high definition MPEG4/H.264 encoder. It has a wide range of digital/ analog video and audio inputs: CVBS, HD-SDI, YPbPr and stereo audio. It can support up to high definition TV up to 1080P, and the compressed MPEG4/H.264 signal is outputted from the ASI and IP port.

The WDH-5700EC's re-multiplexing function enables creation of a new transport stream between the TS of encoder and the TS from ASI or IP. The encoder/trans-coder output can be multiple SPTS or MPTS over IP, as well as over ASI. In trans-coding mode, the digital audios are looped through and time stamping is automatically implemented to ensure the synchronization between video and audio. This unique encoder/trans-coder with built-in re-multiplexer architecture makes the WDH-5700EC one of the best solutions to meet the MPEG2 to MPEG4/H.264 migration in today's digital broadcasting market.

Main Feature

- Multiple video resolution including 1080p, 1080i, 720p, 576i and 480i
- Multiple inputs, HD-SDI, YPbPr, and CVBS
- Unique video and audio synchronization by time base correction
- Support 10/100M TS/IP SPTS and MPTS
- Built-in re-multiplexer for encoder loop
- Support VBR and CBR encoding mode
- Support 2 pairs of analog stereo audio encoding with optional extension board
- Remote Control and Supervision by SNMP, HTTP WEB

Application Case



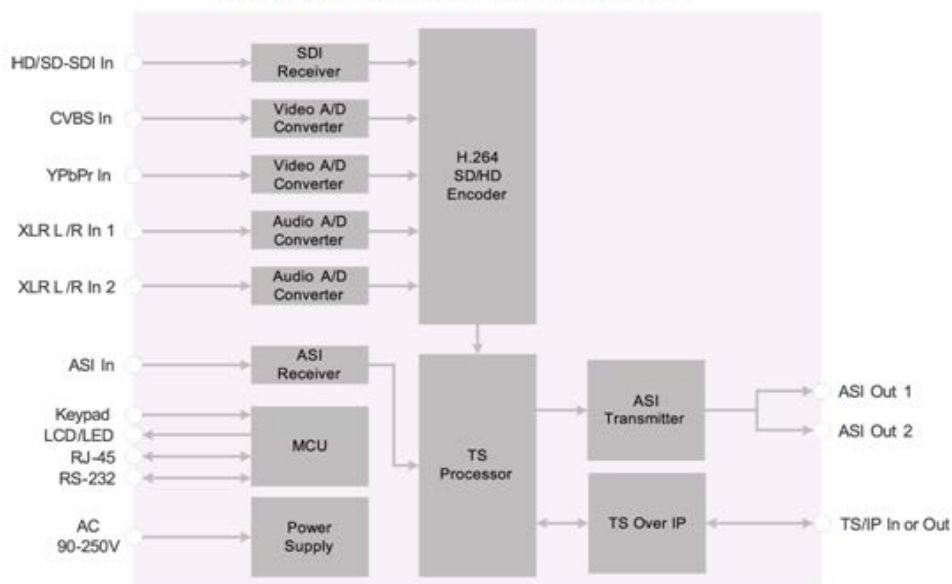
Specification

Video Compression	
Analog Input	Analog NTSC, PAL and SECAM
Digital Input	SD-SDI (SMPTE-259M)
Compression Standard	MPEG-2 MP@ML
Video Resolution	480i (720×480) @29.97Hz: SMPTE125M 576i (720×576) @25Hz: ITU-R BT.656-4
Aspect Ratio	4:3/16:9 selectable
Video Compression bit rate	1.5~20Mb/s
Audio Compression	
Audio Channels	1 pair of stereo
Compression Standard	MPEG-1 Layer II
Audio Mode	Stereo, Joint Stereo, Dual Mono, Mono
Audio Sampling Rate	32, 44.1, 48 KHz
Audio Compression bit rate	32, 64, 128, 192, 256, 384 Kb/s
Audio/Video Input Interface	
Analog Audio	Balanced Audio XLR L / R
Analog CVBS	1×BNC female, 75Ω
S-Video	1×S-Video female, 75Ω
SD-SDI	1×BNC female, 75Ω
SDI embedded audio	Group 1 to 4 selectable
ASI Input	
Connector Type	1×BNC Female, 75Ω
Input bit rate	≤ 100Mb/s
Packet Mode	Byte or Burst
Packet Length	188/204 Bytes
TS Processing	
TS Input Management	Remux and demux between ASI input and the SPTS encoded
Service and PID management	Remux, filtering and remapping
PSI/SI	PSI/SI table generation, NIT and SDT edition

TS over IP Output	
Connector Type	1×RJ-45, 10/100 Base-T for TS/IP
Useful bit rate	70Mb/s min
Protocol	UDP / RTP, Multicast / Unicast, IGMPv2, ARP
Source	Built-in Re-mux, ASI input, Encoder
ASI Output Interface	
Connector Type	2×BNC Female, 75Ω
Output bit rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp±10%
Source	Any one of Built-in Re-mux, ASI input and Encoder
Control & Monitoring	
Connector Type	1×RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	SNMP, HTTP Web, Proprietary HDMS Software
Local Control	Front Panel
Software Upgrade	Built-in FTP server + Telnet
Physical	
Dimension	44mm×483mm×240mm
Net weight	2.8Kg
Power Supply	AC 90V~250V, 50/60Hz
Power Consumption	Maximum 20W
Operating Temperature	0~45°C
Storage Temperature	-10~6°C
Operating Humidity	10~90%, non-condensed
Certification	
EMC: EN 55024:1998+A1:2001+A2:2003, EN 55022:2006+A1:2007, EN 61000-3-2:2006, EN 61000-3-3:2008	
FCC: Part 15 Class B	
LVD: EN 60950-1:2006 + A11:2009	

Block Diagram

WDH-5700EC Functional Block Diagram



Order Information

Functionality / Model		WDH-5700EC-60	WDH-5700EC-80
Input	Analog Audio Input (Stereo L/R, RCA)	•	•
	HD SDI Input (BNC)	•	•
	CVBS Input (RCA)	•	•
	YPbPr Input	•	•
	ASI Input	•	•
Processing	Built-in Remultiplexer	•	•
Output	ASI Output (2x mirrored)	•	•
TS/IP I/O	10/100M TS/IP Extension Board (Single RJ-45,6 Channel)		•

Back Panel Interface

