

DCH-6000EC

Professional HEVC 4K Encoder



The DCH-6000EC is a high quality multiple program high definition H.264 (AVC)/H.265 (HEVC) encoder. It has four HD-SDI inputs port. It can receive SDI signal and encode one 4K TV or four SD/HD programs into a Transport Stream (TS) with H.264/H.265 compression. The internal built-in Time Base Correction functional block ensures the stability of encoding process from audio and video intermittence.

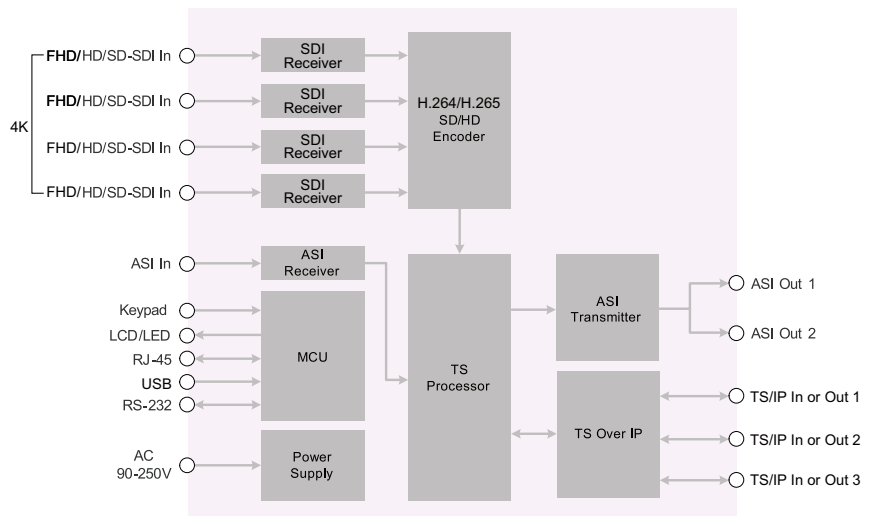
The internal re-multiplexing function allows creation of a new TS formed with the TS internally encoded and the TS from ASI or IP input. The final TS can be multiple SPTS or MPTS over IP, as well as over ASI. DCH-6000EC is one of the best solutions to meet the H.265 migration in today's digital broadcasting market.

Main Feature

- Multiple video resolution including 2160p, 2160i, 1080p, 1080i, 720p, 720i, and 480p, 480i
- Four HD/SD-SDI input
- Internal Time Base Correction (TBC)
- MPEG-1 Layer II & AAC LC audio encoding
- Supports 100/1000M TS/IP SPTS and MPTS
- Supports UDP/RTP/HLS/RTMP protocol
- Built-in re-multiplexer for encoder loop
- Supports VBR and CBR encoding modes
- Remote Control and Supervision by SNMP, HTTP WEB

Block Diagram

DCH-6000EC Functional Block Diagram



Specification

Video Compression	
Video Resolution	2160p (3840 × 2160) @ 60 Hz, 50Hz 2160i (3840 × 2160) @ 30 Hz, 29.97Hz, 25p, 24p 1080p (1920 × 1080) @ 59.94 Hz, 50 Hz 1080i (1920/1440 × 1080) @25Hz, 29.97Hz 720p (1280 × 720) @50Hz, 59.94Hz, SMPTE 292M 480i (720 × 480) @29.97Hz: SMPTE 259M 576i (720 × 576) @25Hz: SMPTE 259M
Compression Standard	H.265 (HEVC), H.264 (AVC), High Profile Level 4.0
Aspect Ratio	4:3 / 16:9 selectable
Chrominance Sampling	4:2:0 8bits 4:2:0 10bits 4:2:2 8bits 4:2:2 10bits
Video Encoding Bit Rate	200Kb/s-80Mb/s 1920x1080p / 59.94/50 fps: 3~30Mb/s 1920x1080i /25/29.97fps: 3~24Mb/s 1440x1080i /25/29.97fps: 2.5~24Mb/s 1280x720p /50/59.94fps: 2~24Mb/s 720x480i /29.97fps: 1~10Mb/s 720x576i /25fps: 1~10Mb/s
Recommend Video Encoding Bit Rate	
Audio Compression	
Compression standard	MPEG-1 Layer II, AAC LC
Audio Input	Embedded Audio
Audio Channels	Stereo, Mono
Audio Sampling Rate	48KHz
Audio compression Bit Rate	64 ~ 384Kb/s
Audio/Video Input Interface	
HD-SDI	4×BNC Female, 75Ω
ASI Input	
Connector Type	1×BNC Female, 75Ω

Input bit rate	≤ 100Mb/s
Packet Length	188/204 Bytes
TS Processing	
TS Output Management	Remux and demux
Service and PID management	Filtering and remapping
TS Input Management	Remux and demux between ASI input and the SPTS encoded
PSI/SI	PSI/SI table regeneration, NIT and SDT edition
TS over IP	
Connector Type	3×RJ-45, 10/100/1000 Base-T
Effective bit rate	300Mb/s
Protocol	UDP, RTP/UDP, Multicast, Unicast, HLS, RTMP, IGMPv2, ARP
Source	Built-in Re-mux, ASI input, Encoder
ASI Output	
Connector Type	2×BNC Female, 75Ω
Output bit rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp±10%
Control & Monitoring	
Connector Type	1×RJ-45, 10/1000 Base-T
Remote Control	SNMP, HTTP Web
Local Control	LCD display and 6-key keypad
Software Upgrade	web
Physical	
Dimension	44mm×483mm×318mm
Net weight	3.2Kg
Power supply	AC90~250V, 50Hz/60Hz
Power Consumption	Maximum 20W
Operating Temperature	0 ~ 45°C
Storage Temperature	-10 ~ 60°C
Humidity	10 ~ 90%, non-condensed

Back panel Interface

