

E7i

DIBVISION | DIBSYS

12G-SDI UHD 4K@60 Network Encoder

4K
ULTRA HD

H.264
MPEG-4/AVC

HEVC
High Efficiency Video Coding

SDI

HDMI

UDP/SRT/RTMP/RTSP/HLS



E7i, a high integrated professional Digital Head-end equipment, with 1x 12G-SDI and 1x HDMI2.0 Input, delivers secure 4K@60fps input encode, with multiple streaming protocols, multiple chroma sub-sampling, adjustable encoding parameters, and compositing, all in a convenient, quiet, low power, rack-ready appliance that fits almost any encoding application. Its high integration and cost-effective design make this device widely applied in IPTV, live stream, broadcast, video conference, remote education, network video record etc.

Enjoy a variety of streaming protocols—HLS, UDP, RTMP, RTSP, and SRT—for trouble-free streaming. Support for the Secure Reliable Transport (SRT) video transport protocol means that ultra-low latency and high-performance streaming is also realized on noisy or unpredictable networks such as the public Internet. It has been compatible with most of streaming platforms, you can choose any of the popular streaming platforms to go live at any time you like, such as Ustream, Livestream, Twitch, Facebook Live, and YouTube Live or even build your own using WOWZA Streaming Server.

Features

- Support H.265(HEVC) and H.264 Encoding
- 1x 12G-SDI and 1x HDMI2.0 Input
- Up to 4K@60fps 4:2:2 10-bit, 1080@60fps 4:2:2 10-bit
- Support internet delivery protocols including UDP, RTSP, SRT, HLS and RTMP
- Ultra Low Bandwidth lowered to 1Mbps for HD, 4Mbps for 4K
- uses the leading FPGA technologies, advanced-level AVC/HEVC algorithm
- Built-in LCD Screen
- supports a professional YCbCr 4:2:2 color space and a 10-bit color depth
- Support NTP timestamps for video streams synchronising
- Low power consumption
- High integration and low power consumption

Application

- IPTV
- Digital Signage
- Video Conference
- Replace HD Video Capture Card
- Hotel TV system
- Live Broadcast

IPTV, DTV ,lecture capture, online courses, remote learning, course recording, broadcast meetings, Web training, remote pathology, telemedicine, conferences, concerts, sports



TECHNICAL SPECIFICATIONS

AV INTERFACES

Physical Interface	1x 12G-SDI input, 1x HDMI2.0 input
Resolution	Up to 4K@60fps, 10-bit YUV

ETHERNET INTERFACE

Physical Interface	1x RJ45, 10/100/1000M auto-negotiate
Protocols	Unicast & Multicast, HLS, SRT, RTMP
IGMP compatibility	Version 1, 2 & 3
TS Bitrate	600 Kbps to 100 Mbps

VIDEO PROCESSING

Codec/Profile	HEVC (H.265) up to MP@5.1 AVC (H.264) up to HP@L4.2
Rate Control	CBR(Constant Bitrate), VBR(Variable Bitrate)
Chroma Sampling	4:2:0, 4:2:2
Bit Depth	8-bit, 10-bit
Resolution	3840x2160p (UHD), 1920x1080, 1280x720 (HD)
Frame Rate / Scan Mode	60p, 59.94p, 50p, 30p, 29.97p (2160p) 60p/i, 59.94p, 50p/i, 30p, 29.97p (1080) 60p, 59.94p, 50p (720)
GOP structure	All Intra, Adaptive, Basic, Pyramidal, Low Delay
Latency (developing)	<70ms (Ultra Low Latency Mode)
Encoding bitrate	up to 100Mbps

AUDIO PROCESSING

Codec/Profile	MPEG-2 AAC-LC, Opus
Aspect Ratio	Linear PCM
Sampling Rate & Depth	48KHz, 16-bit
Capability	Up to 4 channels (2 channel of stereo)

MANAGEMENT

Connector Type	Streaming Port RJ45
Remote Control	HTTP(S)
Local Control	LCD display
User Interfaces	Full control via web GUI
Software Upgrade	web
Other I/O	1x USB3.0 Type-C, 1x RS232

Environment

Power Consumption	Max. 12W for 4K, Max.8W for HD
Supplies	External Adaptor 12V/2A
Dimension	220mm(L) x 200mm(W) x 44mm(H)
Operating Temperature	0 ~ 50°C
Storage Temperature	-10 ~ 50°C
Humidity	10 ~ 90%, non-condensed
Cooling	Heat sinker