

iDEC

DIBVISION | DIBSYS

IP/ASI to HDMI SDI HEVC/H.264 Decoder

H.265 HEVC H.264 MPEG-4/AVC HDMI SDI URL



With the significant increase in TV sets hitting the Head-end market, content providers and TV broadcasters are looking for low cost Video solution to address the needs of Collect the H264, H265, MPEG2, AVS+ Channels from IPTV Networks, **iDEC Decoder** is the answer.

Advanced Modular Receiver has the capability to provide the ultimate feature-set of HEVC, 1080p allowing broadcasters to achieve the highest possible video quality.

iDEC offers Main, Main 10 High Definition decoding in all industry-standard compression formats combined with ASI and TS/IP together. The unit ingests is through DVB-ASI or GigE and output is through SDI, HDMI2.0, AV ports. This efficient and flexible configuration enhances the use cases and overall effectiveness of the product.

Key Features

- MPEG2,H264,AVS/AVS+ and HEVC Decoded in HD and SD
- **Inputs signals: UDP/IP, ASI simultaneously in DTV, only IP for UDP/RTP, (HTTP/HTTPS/HLS M3U8/ RTSP/RTMP/ MMS/SRT) in Network Decode**
- Multiple Analog and Digital Outputs, ASI, CVBS, HDMI, SD/HD-SDI, AES/EBU Audio, TS/IP
- Decode to Up to 1080P@60fps in HDMI SDI outputs
- Supports VBI TELETEXT, EBU/DVB Subtitle, Closed Caption
- MPEG-TS over UDP IP (MPTS) out
- Configure Audio Channels In Up to 2 *AES/EBU, 2*XLR and 2*embed of HDSDI out
- Low Latency decode
- Audio decoding: AC3/E-AC3/AAC/MPEG1 L2
- Front-panel and web-based user interfaces

Application

- Video Contribution and Distribution in TV studio Station
- UDP/IP, ASI simultaneously input
- Contribution decode of high bitrate HEVC/H.264 video service

TECHNICAL SPECIFICATIONS

TS in/output interfaces

DVB-ASI (optional)	1xASI input, 2x ASI outputs. ≤99Mbps Impedance 75Ω
IP Input	UDP/RTP, (HTTP/HTTPS/HLS/M3U8/RTSP/ RTMP/ MMS/SRT), Multicast/unicast
IP output	MPEG-TS over UDP IP out , Multicast 1*MPTS
Connectors	1xRJ-45,1000Base-T

Output Ports

HDMI Output	
standards	1 * HDMI 2.0a with HDCP2.2/1.4
Resolution	up to 1080p@60fps, 1080i@60fps, 1080i@50fps, 720p, 480i, 576i
Embed Audio	One Channel Decoded

SD/HD SDI Output

Connector Type	1 pair of BNCs (mirrored) , female, 75Ω
SD Standard	SMPTE 259M, 270 Mb/s (10bit)
HD Standard	SMPTE 424M 2.970GBIT/S(10bit)
Level	800mV p-p
Resolution	1080p, 1080i,720p,576i,480i
Frame rate	60, 50, 30, 29.97, 25 fps
Embed Audio	Up to 2 Channels Decoded

Analog Audio Output

Connector Type	2×port with XLR adaptor cable
Output Impedance	600Ω (balanced)
Output	Mode Left, Right, Dual Mono, Stereo
Number of Output	2 pairs of stereo audio outputs (2 Audio PIDs or 4 channels are decoded).
Cross Talk Among Channels	>70dB
THD	<0.3% @ 400Hz, 1KHz test tone
Frequency Response	±0.5dB over 20Hz ~ 18KHz

Analog Audio Video Output

Connector Type	1* CVBS , 1 pairs of R/L analog, RCA, 75Ω,
Output level	I.0 Vp-p±5% Standard test stream
CVBS Standard	PALBDGHI, PALN, NTSCM, PALN-C, NTSCM, NTSCM443, PALM, SECAM, NTSCMJ
SNR	≥ 56dB
synchronizing amplitude	300±20mVP-P
frequency characteristic	±0.8 dB (4.8MHz); ±1 dB (4.8-5MHz); +0.5/-4 dB (5.5 MHz)

Output amplitude	700±30mVP-P
Differential gain	≤ 8%

Digital audio output

Connector Type	3pin Female with XLR adaptor cables
Number of Output	Up to 2 audios are decoded
Output Format	AES/EBU

Video Decoding

MPEG-2(MP@ ML for SD, MP@HL for HD)	
MPEG-4/H.264 AVC Part 10 (MP@L3 for SD,HP@L4.1 for HD)	
HEVC(main and main 10 profile, main/high tier up to level 4.1)	
AVS/AVS+(Jizhun/Guanbo profile, level6.0)	
Chroma Sample	4:2:0
Bit Depth	8-bit, 10-bit
Decoding Latency	300-1000ms

Audio Decoding

Audio Standard	MPEG-1 Audio Layers I & II AAC-LC, HE AAC V1/V2 AC3/E-AC3 Dolby Digital/Dolby Digital Plus Dolby Digital Passthrough DRA
Dual Audio Tracks	1 by default, 2 optional

Data output

Subtitle	DVB/EBU/Teletext
Closed Caption	EIA 608, EIA 708, EIA 608-to-708

Control & Monitoring

Interface	1*RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	Web management
Local Control	LCD display and keypad

Environment

Power Supply	AC 90V~250V, 50/60Hz
Power consumption	24W
Dimension	450*350*44mm
Operating temperature	0 ~ 45℃
Storage temperature	-10 ~ 60℃
Humidity	10 ~ 90% non-condensed
Weight	5KG