KILOVIEW®

VCell

VCell® P2

4G Bonding Video Encoder

Built-in dual 4G, WiFi,
professional HDMI
H.264/AVC encoder

Product overview

P2 is a professional HDMI H.264 video encoder, designed for outdoor broadcaster, applied in video image transmission. Small size and ultra-low consumption design! It supports up to 1080p60 input.
Input HDMI signal through preceding image processor for image enhancement, then encoding by SOC processor for creating H.264 video encode featured with high performance and low bit rate.
P2 supports unbind audio from HDMI signal, also input audio from Analog Line-in for AAC (MPEG4-Audio) stereo audio encoding or G.711 audio encoding.
Built-in Kiloview Sunshine streaming media server engine is a server with the ability of supporting 20-50 concurrent users access simultaneously.
P2 built in battery can support working 3 hours. And users can prolong working time with the help of mobile power bank. Easy operation and convenient!
P2 is equipped with bracket and hot shoe screw, fixed well on the camera. Button design between bracket and camera makes device disassemble very easily.

Features

High integration, portable, low consumption, high performance

P2, small size of 115mm*75mm*35mm, integrates FPGA, video co-processor and video encoding chip. It is built-in two 4G-LTE modems, IEEE 802.11 b/g/n/ac dual-band (2.4G/5.8G) WI-FI model and built-in lithium battery.
P2 can support up to 1080p60 Full HD video encoding, meanwhile enabling up to 960x540@60Hz sub-stream encoding.
Very low power consumption. Under typical case by opening dual 4G modules, overall power consumption is <=6.5W. Matched up with 6800mAh lithium battery can work for 3 hours.

Low bit rate assuring nice image and quality audio

P2 adopts VLB (Very Low Bit Rate) H.264 video encoding technology, bonding with preceding video processor to do video dynamic noise reduction, image enhancement, etc.. Generally, 1Mbps@720p, 1.5Mbps@1080p can achieve good video encoding quality, which meet needs of low bit rate and quality image under internet applications.

Support Wi-Fi and 4G-LTE

P2 has built-in two 4G-LTE modules, working with SIM card. It supports bonding work of multiple 4G-LTE modules to enhance bandwidth and improve transmission reliability. P2 also supports built-in IEEE 802.11 b/g/n/ac dual-band (2.4G/5.8G) WI-FI model.

Powerful streaming media protocols supported and full service function

P2 needs to work with Kiloview CellCentre 4G bonding streaming media platform (software). CellCentre platform is a cloud server platform provided by Kiloview, connected via Phone APP to enable or stop 4G bonding service. CellCentre fully supports RTMP/HLS/TS and RTP/RTSP/ protocols. CellCentre push bonded video streaming live to many global live video platforms, or providing video transit and distribution, 20-50 concurrent users to access simultaneously.

{Note: Only with P2 hardware couldn’t realize bonding transmission, but could realize normal encoding/transmission and pushing functions}

Easy operation and professional quality

P2 allows you to use Web interface to manage device, as well as Phone/PAD App.

Other features

- Supported global live video platform (tested): YouTube, UStream, Twitch and so on.;
- Supported streaming media server platform/CDN system (tested): Wowza, FMS, RED5, SRS, etc.;
- Local storage and recording based on Micro SD/TF card;
- Support image rotation, cutting, gray scale and other special image processing;
- Support character /image overlay;
- Support quick function customization (Please contact salesman or factory technical support);
- Two-way voice intercom function (based on factory provided solutions or for customization).

Main parameters

Interface	Video input	1*HDMI
	Analog video input	Based on USB extend Microphone input or Line-in input
	Analog video output	Based on USB extend Headphone input or Line-out output
	SIM card slot	2*Micro SIM card slot
	USB	2*USB 2.0 Type-A
	Micro SD	1*Micro SD/TF Card storage interface
Operation button	Red button	Power key
	Black button	Function key
Network support	4G-LTE built-in	4G-LTE module
	Wi-Fi	Built-in Wifi module, IEEE 802.11 b/g/n/ac Dual-band (2.4G/5.8G),external antenna
Signal and formats	HDMI interface standard	HDMI 1.4a
	Supported video formats	1080p23.98/24/25/29.97/30 1080p50/59.94/60 1080i50/59.94/60 720p23.98/24/25/29.97/30 720p50/59.94/60 and other resolutions ≤1920x1200
	Audio	stereo HDMI embedded audio
Encoding	Video encoding	H.264/AVCHigh profile (up to level 5.1), compatible with Main profile and Baseline
	Multi-stream supported	Support multi-stream encoding, including Main /Sub stream and Motion JPEG image encoding Main stream: up to 1080p60,the highest bitrate is 30Mbps Sub stream: up to 960*540,the highest bitrate is 4Mbps Motion JPEG: up to 1920*1080 encoding
	Audio encoding	AAC/MPEG4-Audio, G.711 (u-Law/a-Law) {Other algorithm can be extended}
	Encoding latency	≤67ms
	Video encoding bitrates	256Kbps~30Mbps adjustable
	Audio encoding bitrates	32Kbps ~ 512Kbps : AAC encoding 64Kbps : G.711 encoding

Transmission protocols and Management protocols	Transmission protocols	RTP / RTSP (compatible RTP over RTSP, RTSP HTTP Tunnel and RTSP Multicast) RTMP pushing, RTMP service, TS over UDP, HLS
	Management protocol	HTTP
Management ways	Management interface	Web and Android APP
	Remote management	Support
	Online firmware updating	Support
Working environment	Power	DC 12V 1A
	Operating temperature	-4 to 131° F / -20 to 55° C
	Relative humidity	20 ~90%RH(un condensation)
	Power consumption	6.5W Max
Size and accessories	Size	115 x 75 x 35 mm
	Weight	420g
	Wi-Fi antenna	Built-in PCB antenna
	4G antenna	3db rod-like antenna
	Power adapter	External DC 12V 1A adapter
Battery	Standard	built-in lithium battery, external I5V mobile power supply
	Volume	3.7V 6800mAh（29.6Wh）
	Life time	> 3 hours
	Fixing	1/4” hot shoe screw
	Charging methods	12V 1Apower adapter charging

Contact us

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