Magicbox HD3 Plus

2nd Generation HDMI/AV/VGA
Video IPTV Streamer



Lowest cost and easy-to-use video streaming appliance designed for professional video producers who need to to broadcast high definition video. The encoder is a professional high and standard definition video coding product. The product has the function of supporting 1/8/16 channels HDMI video capture, generate dual stream of H.264 encoding output and the AAC audio format. The product has high integration and reasonable price. From any HDMI input source such as a camera or switcher, generates an H.264-encoded stream compliant with RTSP, HTTP, UDP, RTMP and HLS protocols. The product can be applied to education, health care, IPTV, conference, remote education, news interview, banking, transportation and other industries.

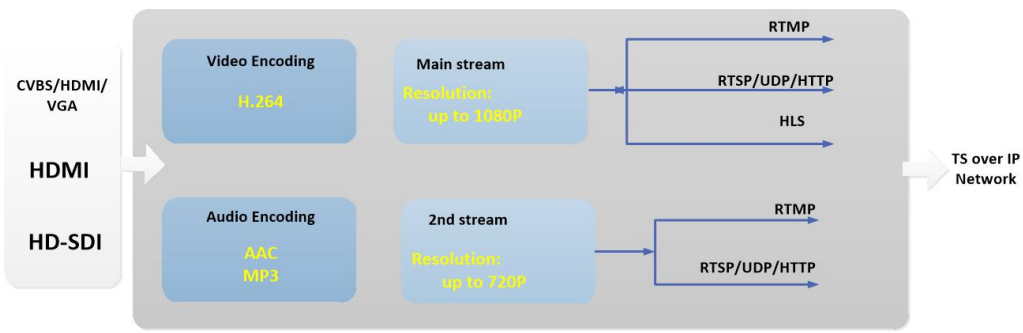
This series can deliver H.264-encoding video streams to various servers, such as Adobe Flash Server, Wowza Server, Windows Media Server and some other servers based on UDP/RTSP/RTMP/HTTP/HLS protocols.

With MagicBox HD3 plus series, it can broadcast To Any Streaming Platform and allows you to stream your live video content to a Wowza server or the platform of your choice at any time.

Features

- HDMI, HDMI/AV/VGA/HD-SDI Inputs per module
- 16 channels (in 2 RU), this model can support dual power supply input
- Two Protocol, Bitrate, Resolution, Profile per HDMI Source Inputs
- Dual streams out, Each HDMI input source simultaneously support one channel up to 1920x1080p Full HD and one channel 1280x720 HD output
- Each channel stream can simultaneously support any one among the UDP/RTSP/HTTP/HLS protocol, including RTMP protocol output
- Support the standard flow driven architecture of Microsoft (the WDM architecture), Support the WMENCODE of Microsoft.
- Be compatible with Windows VFW software architecture and WDM pattern
- Support simultaneous display of one computer and multiple devices
- H.264 High/Main/Baseline Profile, AAC audio
- Video bit rates: 16-12000kbps
- Audio bitrate: 48-256kbps
- Audio gain: -20db~10db
- HD-to-SD downscale conversion
- WIFI: 2.4Ghz, optional
- Superior video quality at ultra-low bitrates, generally video bitrate advised SD about 680kbps, 720p about 1mbps,1080p about 3mbps for lowest bitrate
- Support CBR and VBR mode
- PMT ID and Transport ID meet the DVB standards
- WEB Management
- Easy-to-Use System Management

Principle Chart

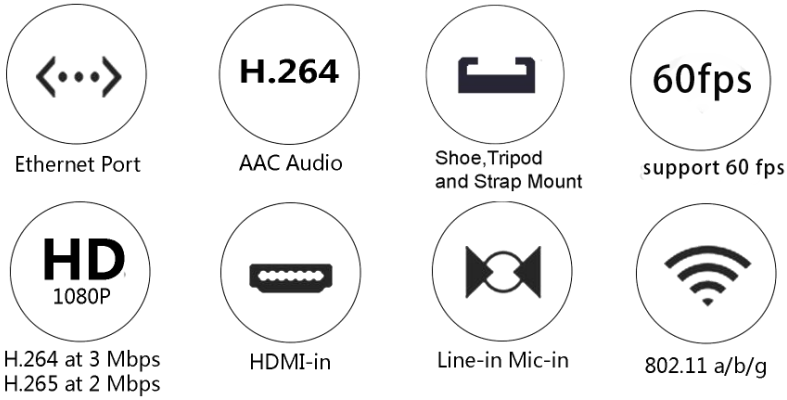


Main Application

- Low Bitrate Video and audio compression transmit
- IPTV, conference, remote education
- Backhaul/Monitoring for Broadcasters

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Core Features



TECHNICAL SPECIFICATIONS

Video Inputs

	1*HDMI or HDMI/AV/VGA or HD-SDI per module (support HDCP protected)
	1/8/16 channels optional

Audio Inputs

Processes first two channels of audio embedded in HDMI input signal
Unbalanced analog stereo input via 1/8" (3.5mm) jack(option)

OUTPUTS

IP Output type	RJ45 providing 10/1000Base-T Ethernet with Static or DHCP addressing;
Protocol	RTMP, RTSP, HTTP, UDP, HLS(option) Multi-cast (number of clients may vary from 3 to 10)
Multi-Screen	Up to 2 channels High def. and any resolution of streams simultaneously out per
Frame rate	@30/60 fps

Users Interface

Computer Based control	HTTP via standard PC or web browser using Command Center. The simple Control API and SDK is also available to programmers to create their own application

Pre-processing

Image setting	Video adjustments (Brightness, contrast, Saturation, Hue)
Frame rate	from 5fps to 60fps
Image insertion	OSD insertion
Enhancement filter	Deinterlacing; Noise reduction; Sharpening; Visual Optimizing; Filtering

WIFI optional

IEEE 802.11 b/g/n client
Embedded high-performance 32-bit RISC microprocessor
Highly with integrated RE with 55nm CMOS technology
1T1R mode with support of 150Mbps PHY rate
Integrated high efficiency switching regulator
Best-in-class power consumption performance
Compact 5mm x 5mm QFN40L package
1/2/3/4- wire PTA WIFI/Bluetooth coexistence support
802.11 d/h/k compliant
Security support for WFA WPA/WPA2 personal, WPS2.0 WAPI
Support 802.11w protected managed frames
Qos support of WFA WMM, WMM PS
Support WIFI Direct
Fully compliance with USB v2.0 High-speed mode
Per packet transmit power control
Antenna diversity
Auto-calibration

H.264/MPEG-4 Part 10 (AVC) Video Encoding

Bitrate mode	VBR, CBR
HDMI	
First stream	1920*1080, 1280*720, 1024*576, 850*480, 720*576, 704*576, 640*480, 640*360, auto
Second Stream	1280*720, 800*450, 720*576, 720*408, 704*576,640*480, 640*360, 352*288, 320*240, 320*180, auto
AV	
First stream	1024*576, 850*480, 720*576 704*576, 640*480, 640*360, auto
Second Stream	720*408, 704*576,640*480, 640*360 352*288, 320*240, 320*180, auto
Encode Frame Rates	Encode frame rates representing 1:1, ½ and ¼ of the input frames rates are supported
Encoding Profiles	H.264 Main Profile/High Profile/Baseline Profile
Video Bitrate	16kbps to 12Mbps
Encoding Controls	1.2, 2.0, 3.0, 4.0, 5.0 Level Support Variable bit rate Support Average max/min data rate controls Deblocking Filter
Key Interval	5-200

Audio Encoding

Audio encoding	AAC, MP3, LC AAC, HE AAC
Bit Rates	Range from 48 kbps to 256 kbps
Resample Rate	32Khz, 44.1Khz
Audio Channel	L+R, L, R

Control

	1000M Base T Ethernet, RJ45,auto-negotiation
	Management via Web
	Language English/Chinese

Environment

Power Supply	+12V (Compact size), 220V (1RU/3RU)
Power consumption	28W
Operation temperature	0 -50°C (32 -122°F)
Storage temperature	-40-70°C (-40-158°F)
Dimensions	150*120*40 mm(Compact) 430mm x 250mm x 45mm (1RU) 360mm x 485mm x 98mm (2RU)
Weight	1.0kg (Compact); 4.0kg (1RU); 7.5kg (2RU)

Ordering Information

1 channel input --- Magicbox HD301 Plus
8 channels inputs --- Magicbox HD308 Plus
16 channels inputs --- Magicbox HD316 Plus

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