

## ADD-ON : VDE-265



### **h.265 and h.264 compatible encoder & IP streamer as boxed or 19" 1RU**

- HD-SDI or SD-SDI or VGA input for encoding (Loop out)
- Stereo Audio embedded or external Input (3.5mm stereo)
- HD Resolution 1920x1200@60fps, 1080p & i – encode in p, 720p, ...
- IP output: RTSP, RTMPs, UDP/RTP, HTTP, HLS, FLV, SRT, MJPG
- Distribution of VGA-Monitor or Video Camera and other sources content over LAN, WAN or internet.
- Min. 2 simultaneous and independent Live stream broadcast encoder engines to multiple destinations
- Video-over IP applications (Studio signal distribution)
- IPTV/OTT applications
- Hospitality Environment (X-Ray-Monitor), Camera streaming
- IPTV on LAN applications, Corporate IPTV for Broadcasters
- HD and SD video encoding (incl. 1080p)

#### Complementary products:

- HDD-275 Decoder IP to 4K/HDMI/HD-SDI/VGA/CVBS outputs
- IPTV Set Top Box 6800+
- HDC-5004: IP UDP/RTP to 4 muxed adj. RF DVB-C Modulator
- HDC-5016: 512 IP to 16 DVB-C channels

*BLANKOM VGA / SDE-(1)265 encoder serves the Distribution of SD and HD TV/video content through IP networks in digital quality.*

*The live video can be received by Internet media server by TV sets with IPTV Set-Top Boxes, on PC has and tablets with VLC Player.*



**BLANKOM SDE-265 & SDE-1265, VDE (VGA)**  
**IPTV encoder is designed for TV signal distribution in excellent quality over LAN and INTERNET.**

**The h.265 (HEVC) compatible compression technology features low-latency and low bit rates for IPTV/OTT systems. The high-efficient encoding chips saves bandwidth cost through all its resolution range.**

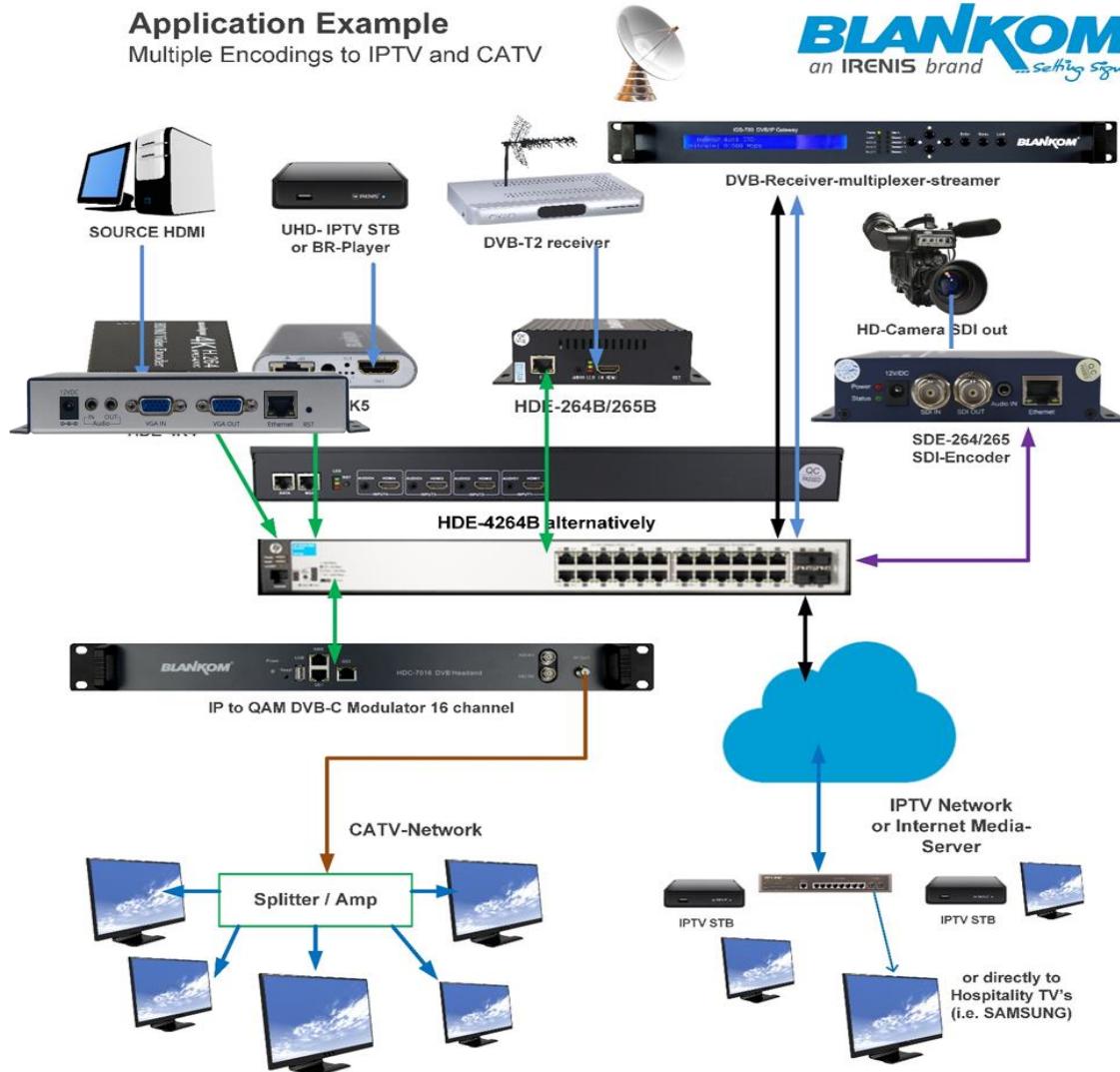
**Distribution of SD and HD TV channels through the IPTV/OTT network using state-of-art IP technology from almost any kind of video input.**

**Excellent video and audio quality. High reliability. No regular service and maintenance need during operation.**

## Application Example

Multiple Encodings to IPTV and CATV

**BLANKOM**<sup>®</sup>  
an IRENIS brand *Setting Signals*



Function	h.265 (HEVC compatible) and h.264 (MPEG4 compatible) Encoder and IP Streamer
INPUT	VGA input and loop through output
Resolution	1920x1200, 1920x1080, 1680x1200, 1600x900, 1440x1050, 1440x900, 1360x768, 1280x720, 1280x800, 1280x768, 1024x768, 1024x576, 960x540, 850x480, 800x600, 720x576, 720x540, 720x480, 720x404, 704x576, 640x480, 640x360, 480x270, etc.
Video encoder	h.265 (HEVC) or h.264 (AVC) or MJPEG
Audio encoder	AAC, AAC++, MP3, MPEG1Layer2, AC-3 stereo compatible, OPUS dep. on Model
Audio Bit-rate:	Bit-rate: 32k/48k/96k/128k/160k/192k, Data-rate: 64 kbps-384 kbps
Data interface	RJ45, 1000BaseT Ethernet interface, management by web browser
Protocol	HTTP, RTSP, RTMPs, UDP/RTP, FLV, HLS ; unicast/multicast, SRT P2P
Data Rate	32 kbps – 32 Mbps
Encoding bitrate process	CBR or VBR (CBR setting enables zero-packet insertion for the TS)
SMPTE 425	Support Level A & B (SDI only)
GOP Structure	IBBP
ONVIF 2.x	Supported by RTSP: G711A
Picture adjust	De-interlacing, Noise reduction, Sharpening
OSD	Logo and Text Insertion as transparent overlays possible
Power supply	12V DC, 1A
Dimensions	165x85x24mm
Weight	0.5 kg
Consumption	5...10W

## Quickstart Variant with VGA Inputs: VDE-265 (no 264 version available any more)



The Front-panel text gives you IN- and Loop-Output connections Audio and Video (VGA separately). Use the delivered 230VAC -> 12VDC PSU and do not use Voltage higher than that. Note: VGA does not have internal Audio like HDMI. Right: RESET Hole (internal button)= Restores factory settings by pressing 5-10 seconds



Rear: Status LEDs S= Signal Input,

E= Ethernet, P=Power status



Sticker with default settings (MAC may be different)

### Notes and Hints:

**The Gigabit-Ethernet-port does not support PoE so please take care of not accidentally using a PoE switch- you can damage the port and the unit will be not accessible anymore.**

We recommend to use an IGMP-V2/3 protocol capable GBE- Switch to avoid flooding your network with unmanaged multicast streams. Also some consumer Internet routers do not like Multicasts (UDP/RTP) and might reboot periodically.

An Internet-connection is not necessary as long as you need to use NTP and does not have an own NTP server in your network.

Please assure that your HDMI –Output you like to encode is set to max. HD with 1080p60 or lower. Higher values will not work.

The embedded Linux system takes some seconds to fully boot. After the System-LED is on, you can connect your browser to it. We recommend Chrome, Opera, and Mozilla. For a preview Popup in the browser, a flash-player add-on need to be installed for the browser.

Sometimes it is helpful to reload the browser – page to get the changed settings and values because of different browser behaviours...

**The RESET button will erase all your settings and the unit will be forced to start with factory defaults.**

Use a thin wire to pass the small hole and press the inside button by it for at least 5-10 seconds until the System LED will go off. The encoder would perform a restart than after releasing the button.

The Web-Interface lookalike may vary between different Versions but it is self-explaining.

Please select Analog Audio Input only if you need that:

BLANKOM  
H.265 HEVC

HD Encoder System  
Platform 5.11

## Audio encoding settings

### Audio encoder

Audio Input: ANALOG

Samplerate: 48000~256000

Encoder: AAC

Bitrate: 128000

Digital Volume Gain: 0~-50

Different to SDI/HDMI:

# Status Display

## Input status

Running Time:0000-00-00 00:00:48

Device Time:2021-10-29 11:06:37 ([Sync Time To Device](#))

Device Name:Encoder\_51281

CPU Usage:9% (If CPU usage always more than 85%, please close some stream.)

Memory Usage:28.2M/247.6M

Input Size: 1920x1080p@0 ([VGA automatic adjustment](#))



Collected Video Frames:0

Lost Video Frames:0

Audio Samplerate:48000

Net Packet Sent:93

Net Packet Dropped:0

VGA resolution will be displayed with automatic

After changing Input, please reload the web-page several times to renew its values shown:

The screenshot shows a web browser window with the URL 192.168.1.168/indexE.html. The page header includes a refresh button, a lock icon, and the URL. Below the header, there is a logo for 'DM H.265 HEVC' and text indicating 'HD Encoder System Platform 5.11'. The main content area is titled 'Status Display' and contains a 'Input status' section. The 'Input status' section lists various system metrics:

- Running Time: 0000-00-00 00:01:58
- Device Time: 2021-10-29 11:07:47 (Sync Time To Device)
- Device Name: Encoder\_51281
- CPU Usage: 7% (If CPU usage always more than 85%, please close some stream.)
- Memory Usage: 28.5M/247.6M
- Input Size: 1920x1080p@60 (VGA automatic adjustment)
- Collected Video Frames: 708
- Lost Video Frames: 3
- Audio Samplerate: 48000
- Net Packet Sent: 161
- Net Packet Dropped: 0

The other menu parts are nearly identically.

Except: This is for HDMI – HDCP TV-Monitors only:

The screenshot shows the 'Advanced' settings section. It includes fields for 'Device Name' (Encoder\_51281) and 'EDID'. The 'EDID' field has a dropdown menu open, showing the following options:

- 0.Default(1080P60)
- 0.Default(1080P60)
- 1.1920x1080@60\_DELL\_U2414H
- 2.1920x1080@60\_ITE
- 3.1920x1080@60\_RGB

So not taking effect on VGA or SDI Inputs

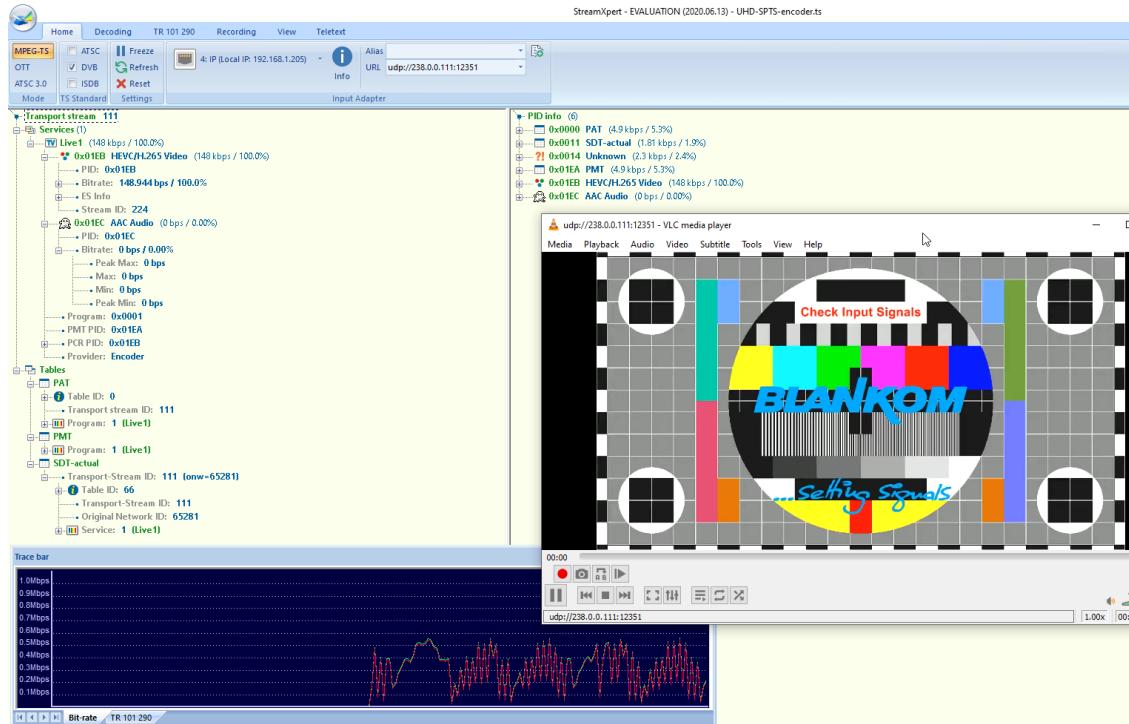
No-Signal Picture if no Input is detected:



The /0.jpg (or in secondary stream the /1.jpg)

Will do a screen-snapshot to your browser – so no motion – just like a screenshot.

**BTW: If no signal has been detected at the Input connector, the Test-picture will appear and the Stream output may 'pump' because the encoder check the input signal periodically – and in this periods', the output stream might fluctuate like:**



Finally: To get more information about the deeper details of the encoder settings and configuration issues, please check some of the combined PDF – Manuals from our website or write us.

Contact:

[info@blankom.de](mailto:info@blankom.de)

[www.blankom.de](http://www.blankom.de)