

## 4Kp60 Encoder & IPTV Streamer with 12G SDI & HDMI Input



h.265 and h.264 compatible 4Kp60 UHD encoder & IP streamer combined with RECORDING function

**4K H.265 HDMI 12G SDI Video Encoder** – Parallel operation of SDI & HDMI input at the same time, max. encoding 1x 4K60 and 1x 1080p60 in parallel.

Multiprotocol-Support:

**Unicast:** SRT / HTTP / HLS / FLV / RTSP / RTMP / RTMPS,

**Multicast:** UDP/RTP Stream Protocols and ONVIF. The Encoder works perfectly with online live broadcast platform's, such as Vimeo, YouTube, Facebook, Ustream, Twitter, etc...

- 12G SDI-BNC and HDMI compatible input for encoding and recording to USB 3.0 in NTFS/exFAT/FAT32 format, with SAMBA server mounting built-in for network connection to the recorded files
- Stereo Audio embedded or external Input (3.5mm stereo) / out
- HD Resolution 2160p60, 1080p, 1080i, 720p...
- GbE IP output: RTSP, RTMP(s), UDP/RTP, HTTP, HLS, FLV, MJPG, SRT
- Distribution of Video Camera U(HD) and other sources content over LAN, WAN or internet.
- 4 simultaneously and independent Live stream broadcast encoder engines to multiple destinations
- Video-over IP applications, Digital Signage, NVR, Hotel Info-channel
- IPTV/OTT applications, Video conferencing, Camera streaming
- IPTV on LAN applications, Corporate IPTV for Broadcastings
- UHD,HD and SD video encoding and downscaling
- Corresponding product: BLANKOM IPTV-STB 6800+ (UHD)
- Motion-JPEG encoding and SRT streaming protocol

**UHD 12G SDI**

### BLANKOM SHDE-4000

**IPTV encoder is designed for TV signal distribution in excellent quality over LAN and INTERNET.**

The h.264 and 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 up to UHD 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.

*BLANKOM SHDE-4000 encoder serves the distribution of SD/HD and UHD TV/video content through IP networks in digital quality. The live video can be received by Video media server, TV sets with IPTV Set-Top Boxes, on PC's and tablets with VLC Player.*



Rear Side view

- Dual Power Supplies (PSU's) with IEC connectors, inbuilt Fuse, Power-switch.
- GbE LAN connector RJ45
- HDMI and 12G SDI Inputs, Additional external 2 pairs of Stereo Inputs by 3.5mm Jacks.

## Application: Parallel Encoding and streaming from HDMI and SDI



Available also in a boxed version *upon request*:

### Applications:

- IPTV (Wowza, nginx, Media Server, ReStreamer2, etc.)
- Online Live Broadcast (OBS, Vimeo, YouTube, Facebook, Ustream, Twitter, etc.)
- NVR (Network Video Recorder), ONVIF Software cathexisvideo.com, ... <https://www.onvif.org/>
- Recording System / <https://medevel.com/10-cctv-open-source-solutions/>
- Digital Signage
- Teaching / Campus Broadcast
- Hotel TV system
- Video Conference



## Product features

- User friendly english Web based interface, default IP is 192.168.1.168.
- Multiprotocol Support SRT / HTTP / HTTPS / HLS / FLV / RTSP / RTMP / RTMPS / UDP/RTP Unicast/Multicast) TS Stream Protocols and ONVIF.
- Support output of Multi RTMP(S) (Main stream & Sub stream) to different Media Streaming Server.
- 4K 4096x2160@60fps / 3840x2160@60 / 2560x1440@144fps etc., input and encoding.
- Max. Colour key support 4:2:2 10 bit.
- click recording, support USB 3.0 in NTFS/exFAT/FAT32 format, with SAMBA server built-in, and video-files splitting adjustment with easy access through SAMBA network reviewing and operation.
- Support Text and image inserting as Logo for Main-& Sub-streams.
- Output Stream bitrate adjustable.
- Additional External Analog audio input & output. Audio digital gain control and adjustment
- Remote control via router port forwarding

## Specifications:

<b>Interfaces</b>	
Video Input	HDMI & 12G SDI input, Max support 4096x2160@60fps / 3840x2160@60 / 2560x1440@144fps,etc.
Audio Input	HDMI & SDI embed audio & External Analog audio input
Ethernet	1000Mbps, RJ-45
<b>Video Encoding</b>	
Video Format	H.264/AVC High/Main/Baseline Profile/H.265/HEVC main profile, MJPEG/JPEG baseline
Video Resolution	Max support 4096x2160@60fps
Video Bitrate	0.1...100Mbps
Video FPS	5-144FPS
Bitrate Control	VBR/CBR/Strong CBR
Streaming Protocols	Unicast SRT / HTTP / HTTPS / HLS / FLV / RTSP / RTMP / RTMPS Multicast UDP/RTP TS Streams
<b>Audio Encoding</b>	
Audio Format	AAC/AAC+/AAC++/MP3/MP2/AC3 G711
Sample Rates	44.1kHz/48kHz
Bitrate	12...640kbps
<b>System</b>	
Control Method	English Web Interface- management – telnet access can be enabled
Firmware	Ethernet software upgrade, default IP 192.168.1.168, default user/pass= admin/admin
<b>Working environment</b>	
Operating temperature	-10 to 70 deg C
Storage temperature	-20 to 80 deg C
Relative Humidity	5% to 90% non-condensing
<b>Miscellaneous</b>	
Dimension (L× W× H)	19" 1RU 480x 270x40 mm with integrated dual PSU or optional boxed 150x110x45mm
Approx. weight	2400g (boxed 500g w/o PSU)
Power adapter	2x IEC plug AC input 100-240V 50/60Hz internal DC 12V 2A