36CH Ultra HD Network Video Decoder

CB-NVD3636 is a very high digital decoding server is on the basis of the field of video surveillance decoding wall, is a comprehensive intelligent video monitoring telecom level equipment, equipped with embedded linux system, stable and reliable. This equipment can realize ultra-high definition decoding, splicing, segmentation, window opening and other functions in large and super-large digital security monitoring system, and provide one-stop solutions for the decoding wall and multi-signal input coding to solve the maximum program digital monitoring system of the engineering project. Compatible with standard ONVIF brand network camera decoding, compatible with mainstream brands NVR / DVR preview and video playback, single card with HDMI input interface, the external computer on the wall display or splicing. Compatibility, more flexibility; can be widely used in supermarkets, shops, office buildings, residential areas, office buildings, schools, hotels, factories and other monitoring places, for users with convenient video monitoring switching and computer wall management value.

Equipment structure

- Whole machine structure: the equipment adopts modular structure design, one machine can be formed by multi-module assembly according to the demand, only need a network cable, the whole machine single IP can be simple network connectivity;
- Single module motherboard: with 2-way HDMI 2.0 4 K @ 60 HZ output, 1-way HDMI input, 1-way audio input, 1-way audio output;
- Equipment structure: adopt multi-module card design, 1U standard chassis can be equipped with 3 module motherboard, 5U chassis can be equipped with up to 16 module motherboard, when there is demand, 10U and larger models can be customized, multiple machines can be cascated, the equipment is equipped with USB, RS485 and other standard interfaces.

physical interface

Single module motherboard function

1、Decoding:

(1) support H.265+/H.265 /H.264/MPEG2　Main Profile Level5.1、H.264 Baseline / Main / High Profile Level5.0, MPEG4 SP L0~L3 / ASP L0-L5, MJPEG / JPEG Baseline decoding;

(2) The maximum single card supports 36 segmentation of 2 HDMI output, and supports HDMI to DVI-I, VGA output;

(3) Single card can support two 36 segmentation decoding at the same time, single card can support decoding 72 IPC wall;

(4) The decoding single card module HDMI interface supports one in and two out, 4 K @ 60 HZ (3840 X 2160 @ 60 HZ) input, 2 channels 4 K @ 60 HZ (3840 X 2160 @ 60 HZ) (punctuation control);

(5) Single card decoding performance: 1 =3200W; 12400W binocular camera; 2 =1200W / 4K (800W pixels); 8500W / 400 / 300W /; 24 =1080P; 32 =720P; 72 =D1 video decoding;

(6) Decoding pixels: support 3200W, 2400W, 1200W, 4K (800W), 600W, 500W, 400W, 300W, 200W, 130W, 100W and other standard video decoding;

(7) Support PAL / NTSL and other standard formats;

(8) Support GB28181 national standard protocol, ONVIF, RTSP, DDNS access stream decoding, and decoder software platform can search network camera mainstream sea kang, dahua, yu, huawei, samsung, male Michael, world, han state, the wisdom, day, TPlink and other mainstream brand camera type for automatic identification (control punctuation);

(9) Support the domain name orientation OSD name superimposed display and IP address decoding channel characters superimposed on the wall;

(10) Optional HDMI signal input card, so that the computer desktop signal, set-top box output signal screen;

(11) Support network automatic real-time detection of whether the broken line;

(12) Support mainstream brands such as Hikom, Dahua, Yushi, Xiongmai, Tiandi Weiye, Hanbang Hi-tech, Median Enzhi, Honeywell and other NVR / DVR / XVR preview decoding and video files on the wall playback;

(13) Support web browser B / S architecture visualization (4-20 pieces) real-time decoding, and synchronization with the real-time video display on the monitoring, compatible with Kirin system, letter innovation system, linux system, android system, Apple ios system, and mobile Android / ios / Hongmeng OS system tablet, mobile phone control (punctuation control);

(14) Support the public security network, transportation network and other national standard GB28181 protocol, compatible with Huawei, Hikon, Dahua GB28181 platform and Hikon, Dahua GB28181 protocol NVR and IPC;

(15) Support ONVIF, GB28181, RTSP, RTP, RTMP, TS, PS and other packaging format protocols for network decoding preview support platform to integrate equipment in SDK way; complete operation and maintenance management; support web access, configuration and management;

(16) **4K@60HZ encoding**

(17) Single card with HDMI 2.0 local signal acquisition, maximum support 1 HDMI 4K @ 60 HZ (3840 X 2160 @ 60 HZ) local signal acquisition (HDMI 2.0 or DVI-I connection) input;

(18) Support the input signal H.265+/H.265/H.264 Baseline / Main / High Profile Level5.1 standard code;

(19) Support external input source primary and secondary code flow while coding on the wall support 4K (3840 X 2160 @ 60 HZ), 1080 P @ 60 HZ, 1366 X 768 @ 60 HZ, 720 P @ 60 HZ and other computer resolution output coding on the wall splicing, support coding resolution automatic adaptation adjustment;

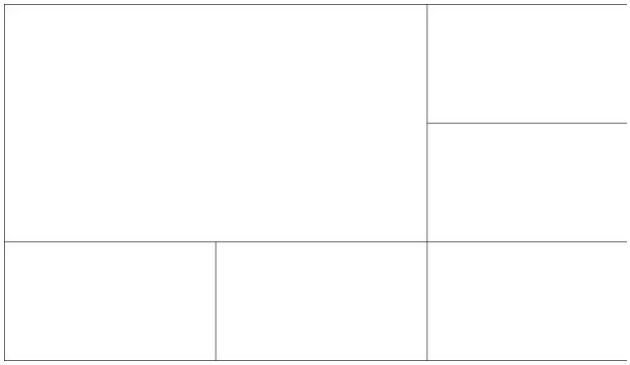
(20) Support the encoding automatic reconnection and power outage memory preservation function;

(21) Support after encoding video flow encryption, external streaming needs to input password verification, to ensure the security of the video;

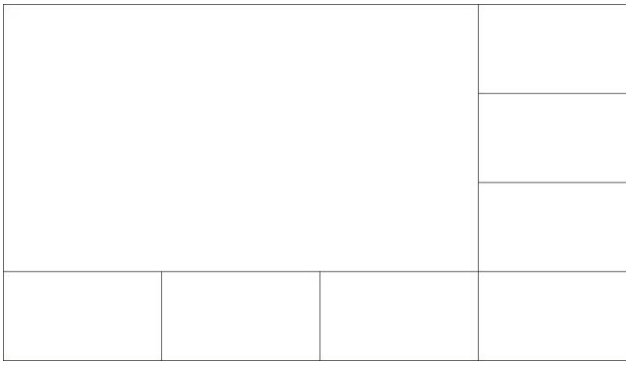
2、 Double-port 4 K @ 60 HZ output:

- Support 24 K @ 60 HZ (3840 X 2160 @ 60 HZ) HDMI 2.0 interface output; downward compatible with HDMI 1.3 version;
- Support 2 HDMI 2.0 output, device output resolution support: 3840 * 2160@60 / 3840 * 2160@30 / 1920 * 1200@60 / 1920 * 1080@60 / 1600 * 1200@60 / 1440 * 900@60 / 1280 * 1024@60 / 1280 * 720@60 / 1024 * 768@60 output;
- Single port supports 1,4,6,8,9,10,16.25,36 arbitrary irregular (MXN) free switching segmentation;

4 Split

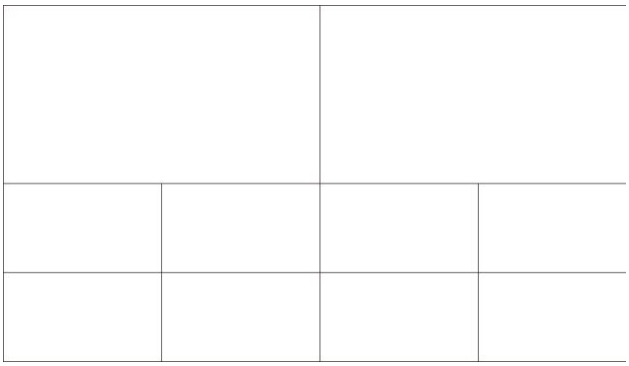


6 Split

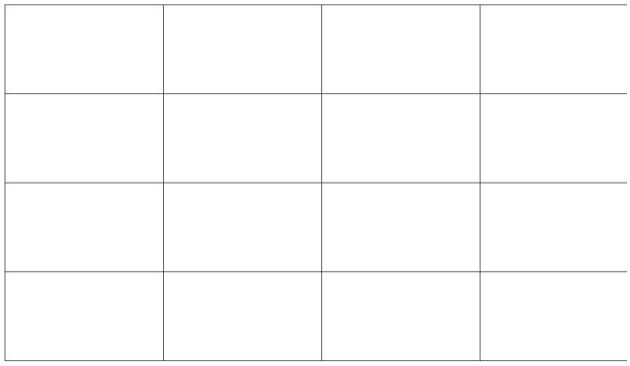


8 Split

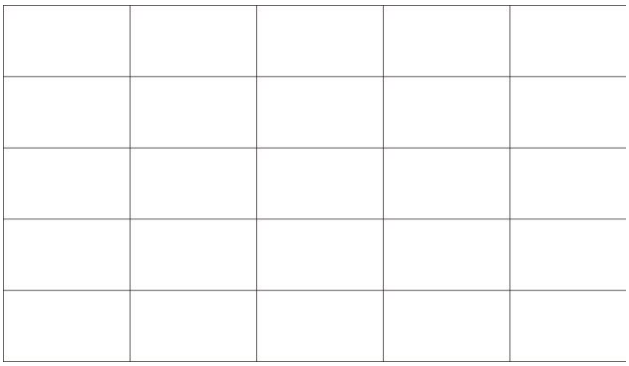
9 Split



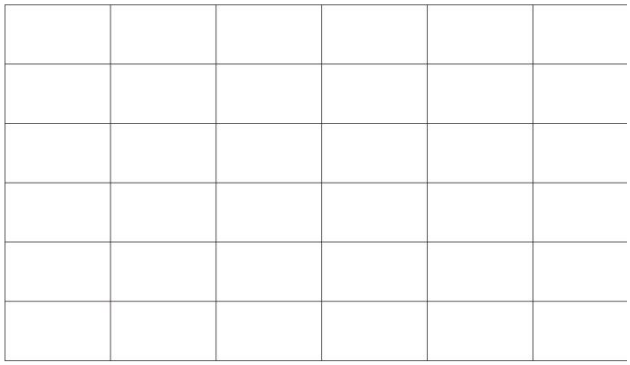
10 Split



16 Split



25 Split



36 Split

3、 Audio frequency:

- With 1 channel audio input and 1 channel 1 audio output;
- support G.711A、AAC、G.722、G.726、G.711U audio format encoding and decoding, support active decoding and passive decoding two modes, can realize two-way voice intercom;
- Support 32bit / 32bit voice input and output;

4、 Network:

- Single card supports 100 / 1000Mbps adaptive network port, optional machine equipped with optical port 100base-FX / 1000base-X support photoelectric adaptation;

5、 Complete machine switch backplane:

- The design of dual 24-port full gigabit switch backplane is adopted to physically isolate the decoding IPC network flow and image splicing network flow. The bandwidth of dual full gigabit core switch backplane is up to 96 Gbps, and the

packet forwarding rate should reach 72 Mpps.

6、 The web browser, tablet computer, mobile phone and other control methods:

- Support dedicated network monitoring keyboard control, and can be in the extended control analog ball machine and binocular ball machine cloud head control;
- Inside database, decoder web browser platform control software for massive network camera (IPC) flow address, parameters, user name, password, name in the form of tables to export to computer local save, or in the form of a local table to import massive IPC information a key to the decoder internal database save (punctuation);
- Decoder platform software supports list intelligent search, can keywords on the name of the surveillance camera list intelligent search, greatly facilitates the management of massive cameras (punctuation control points);
- Support web browser B / S cross-platform and mobile phone, tablet form of real-time display decoding video, visual deployment of monitoring wall;
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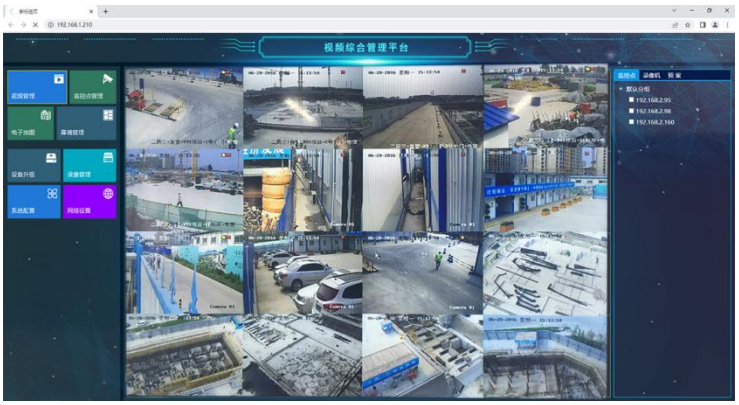
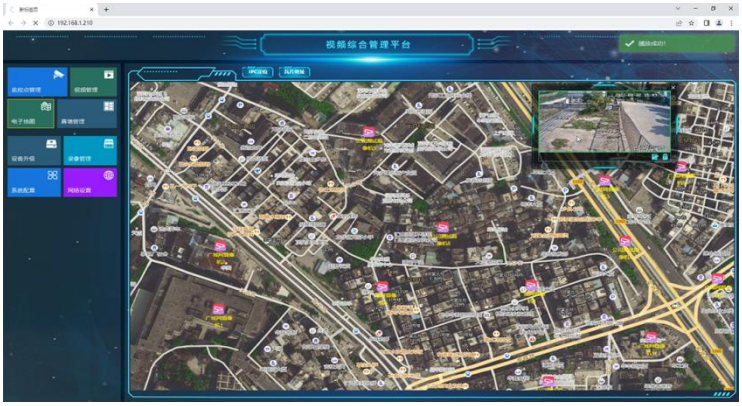


Real-time video display of the web browser B / S architecture

- Can support the web browser online or offline 16 level zoom HD vector visualization electronic map, can be carried out in the latitude and longitude of the camera point tracing point on the map, and in the electronic map can be real-time preview monitoring point network camera real-time picture;



16 level free scaled vector map live video display

The complete machine equipment function:

1、 Output:

- Splicing: realize the splicing of multi-module output port, 1U model maximum 6 screen splicing, 5U model maximum 32 screen splicing, can customize 10U models, 2K signal maximum 120 (8X15) curtain wall of any splicing, 4K signal maximum support 480 (16X30) curtain wall arbitrary splicing, can be multi-stage cascade, from multiple units to achieve larger, super large splicing;
- Complete machine structure: the equipment adopts modular card structure design, the backplane of the whole machine with gigabit load balancing PCIE hardware structure, the whole equipment only needs a single IP, a network cable or optical fiber access can be;
- Segmentation: the single port supports 1,4,6,8,9,10,16.25,36 arbitrary irregular (MXN) free switching segmentation;
- Window opening function: can realize the cross-screen window roaming, superposition, picture in picture window function;
- OSD superposition: support network camera annotation superposition bearing and bearing superposition, IP address superposition, channel number superposition, and network and other abnormal information superposition;
- Decoding: to support for H.265+/H.265 /H.264/MPEG2 Main Profile Level5.1、H.264 Baseline / Main / High Profile Level5.0, MPEG4 SP L0~L3 / ASP L0-L5, MJPEG / JPEG Baseline decoding;
- Single card decoding performance: 1 =3200W; 12400W; 2 =1200W / 4K (800W); 8600W / 500W / 400W / 300W; 24 =1080P; 32 =720P; 72 =D1 video decoding;
- Decoding pixels: 1 =3200W; 12400W; 2 =1200W / 4K (800W); 8600W / 500W / 400W / 300W; 24 =1080P; 32 =720P; 72 =D1 and other standard video decoding;
- Flow: support standard ONVIF IPC, RTSP, national standard GB28181 and mainstream brands, Hik, Dahua, Ushi, Samsung, Huawei, Honeywell and other private protocols access NVR / DVR / XVR, flow preview;
- Protocol: Support the decoding and video streaming of RTSP, RTP, RTMP, TS, ONVIF, GB28181 and other mainstream packaging formats;
- Network detection: support network automatic real-time detection of whether the broken line;
- NVR management: support mainstream brands Hikon, Dahua, Yushi, Xiongmai, Hanbang Hi-tech, DVR preview decoding and video playback.

2、 Operation control:

- Support dedicated network monitoring keyboard control, and can be in the extended control analog ball machine and binocular ball machine cloud head control;
- Support web browser B / S architecture visualization (4-20 pieces) real-time decoding, and synchronization with the real-time video display on the monitoring, compatible with Kirin system, letter innovation system, linux system, android system, Apple ios system, and mobile Android / ios / Hongmeng OS system tablet, mobile phone control (punctuation control);
- Can support the web browser online or offline 16 level zoom HD vector electronic map, can be in the latitude and longitude of the camera point tracing on the map, and in the electronic map can be real-time preview of the monitoring point of the network camera real-time picture;
- Support equipment integration in SDK mode, support third-party software access to SDK control;

3、 Features:

- ❖ Support monitoring the wall scene memory, automatically and manually switch the call scene;

- ❖ Support up to 512 monitoring wall scene memory storage;
- ❖ Support scenarios and groups to patrol on a single or multiple window at time intervals;
- ❖ Support the access of the video box and streaming media server platform, realize the WAN video monitoring, interconnection and wave video decoding on the wall;
- ❖ Supports network fiber 100base-FX / 1000base-FX access;

4、 operation:

- ❖ Inside database, decoder web browser platform control software for massive network camera (IPC) flow address, parameters, user name, password, name in the form of tables to export to computer local save, or in the form of a local table to import massive IPC information a key to the decoder internal database save (punctuation);
- ❖ Decoder web platform software supports list intelligent search, can keywords on the name of the surveillance camera list intelligent search, greatly facilitates the management of massive cameras (punctuation control points);
- ❖ Support online network one-click upgrade;

Model No.	CB-NVD-3616
CH	36
Interface Parameters	
Output Interface	2 with the HDMI
Enter the Interface	1 HDMI
Ethernet	1 RJ45 10M / 100M / 1000M
Video Parameters	
Open the Window Superposition	Support MXN splicing, cross-screen window roaming, superposition, painting in painting
Decoding Format	H.265+/H.265/H.264/MPEG4
Network Video Input	4K/1080P/720P/D1
Output Resolution	3840x2160@60HZ 1920x1080@60HZ 1366x768@60HZ 1280x720@60HZ

Video Decoding is shown	1 picture =3200W / 2400W / 1200W / 800W / 600W 4 picture =500W / 400W / 300W 6 screen =200W; 8 screen =200W; 9 screen =200W / 1080P; 10 screen =200W / 1080P; 16 =720P; 25 = D1; 36 = D1;
Single Screen Segmentation Display	Support 1 / 4 / 6 / 8 / 9 / 10 / 16 / 25 / 36 (MXN) free segmentation;
OSD Information	Support Chinese and English character superposition, window support single line OSD, support warning information display
Single output interface	1080P input maximum cascade splicing curtain wall 8 rows X 15 columns, 4K input maximum cascade splicing curtain wall 16 rows X 30 columns
Management and Maintenance	
Basic Application	Support for user login and logout
Upgrade	Support network upgrading
User-Defined	Support the plan, group, round patrol
Else	
Platform Docking	Provide SDK, support for third-party software access control;
Alarm Input	Support the network alarm host switch quantity signal access and linkage popup;
Decoding Shows the response	Admito 1 second
General Parameter	
Dimensions	430*300*210mm Standard 5 U Case
Power Supply	220VAC
Power Consumption	< 160W
Operation Temp.	-10°C - +55°C
Humidity	10% - 95%
Approvals	
Certification	CE / FCC / RoHS
ISO	ISO9001