iSEMC

NPK DISTRIBUTED

AV KVM Over IP

INTRODUCTION

NPK Series is an integrated cloud node of the multimedia distributed interactive system. It is an integrated encoding and decoding device that supports manual switching to encoding or decoding cloud nodes. System deployment supports two deployment methods: centerless and center-based, and you can choose as needed for the project. When used as an encoding node, it supports 1920*1200@60 video signal collection and encoding; when used as a decoding node, it supports 8K@60 video decoding and 1920*1200@60/3840*2160@60 output display; supports KVM agent Application, supports LED/LCD splicing applications.

FEATURES

- Support 1920*1200@60 /3840*2160@60 video input and output
- Support LCD screen to display device name, device model, hardware version, software version, serial number, and IP address information
- Supports 2 HDMI video inputs; 2 HDMI video outputs
- Supports 1 channel 3.5mm headphone jack input; 1 channel balanced MIC audio input, supports phantom power supply; 1 channel balanced LINE audio input, 1 channel balanced LINE audio output
- Supports 1 optical network port, with a maximum support of 1000Mb/s; supports 1 electrical network port, with a maximum support of 1000Mb/s, and supports POE power supply
- Supports 1 DC power interface, 12V/2A input; device power consumption ≤12W
- Supports 1 channel 3.5mm headphone jack input
- Supports 2 HDMI OUT audio outputs, 1 balanced LINE audio output, and 1 3.5mm headphone jack output
- Support AAC two-channel, G.711a, G.711u, G.722, OPUS audio protocols, 48KHz 24-bit sampling rate
- Support subtitles and background, support text/time/IP address type subtitle display, support font/font size/font color/ background color/background of subtitle content
- Frame size/background transparency/position; support subtitle display/hide control
- Supports KVM seats, supports 8K video decoding, supports audio and video synchronous, asynchronous, and mixed transmission, and supports 90 degrees/180 degrees/270 degrees/360-degree video rotation on-screen display; supports banner display, supports LED/LCD screen splicing synchronous display, supports video tour window opening,
- Supports manual switching between editing and decoding modes on the web page

NPK Series

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High Definition And Multi-Function

Support 8K@60 video decoding, 1920*1200@60/3840*2160@60 resolution output display. Support 1920*1200@60/3840*2160 @60 video signal collection and encoding. Support KVM agent application

Safe And Reliable

Embedded Linux system, no virus intrusion, PoE power supply and external power supply mutual backup, support video input and output redundant backup, support optical and electrical link backup

Easy Maintenance

Fanless silent design, integrated design, manual switching to encoding or decoding, supports 2 units side by side installation, supports 8 units centralized installation, supports web page upgrade

Intelligent Splicing And Unified Management

LED/LCD screen splicing pictures are displayed simultaneously. Distributed system platform software provides unified management and control. Video pictures can be windowed, cross-screen, roaming, and overlaid.

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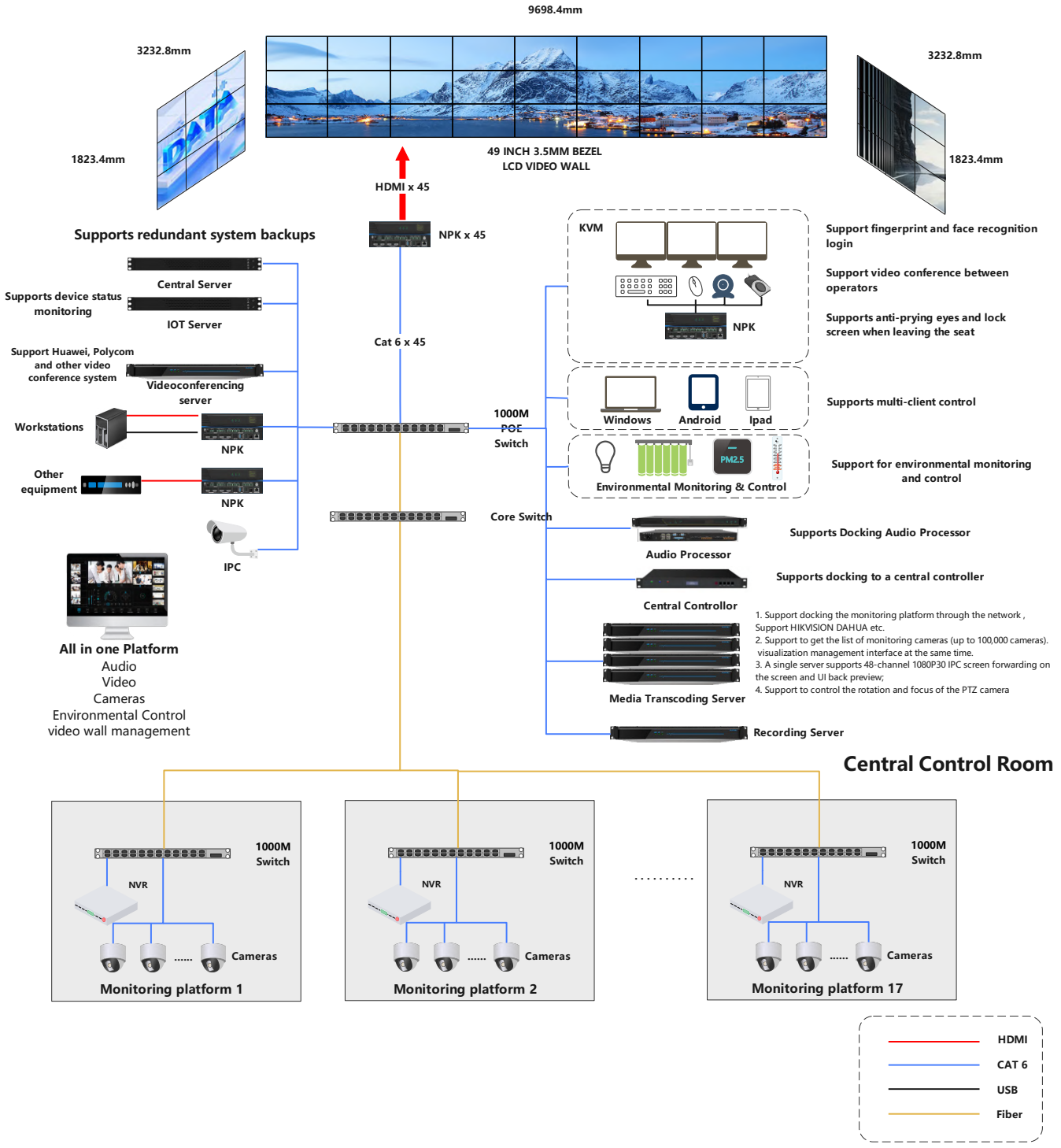
SPECIFICATIONS

Model	NPK-UHD	NPK-FHD
Hardware Configuration	Codec Chip, Independent And Controllable; Embedded Linux System, No Risk Of Virus Or Trojan Intrusion;	
Front Panel	1.3-Inch LCD Screen, Display Device Name, Device Model, Hardware Version, Software Version, Serial Number, IP Address	
Video Interface	HDMI 4K@60hz 4:2:0 Inputs; HDMI 4K@60hz 4:4:4 Outputs; Support HDMI Fixed Buckle	
Audio Port	1xChannel 3.5mm Headphone Jack Input; 1xBalanced Mic Audio Input With Phantom Power Supply; 1xBalanced Line In; 1xBalanced Line Out	
Data Interface	1xUSB 3.0 Host；1xUSB 2.0 Host；1xType-C with OTG supported	
Control Interface	1xRelay；1xIO；1xIR；1xRS232；1xRS485；1xRS232 Debug	
Power Supply	1DC 12V/2A Input; POE	
Power Consumption	≤12W	
Working Environment	Temperature 0~45℃; Humidity 10%～90%; Altitude <= 5000 Meters;	
Storage Environment	Temperature -20℃~60℃; Humidity 5% ~ 90%; Altitude <= 5000 Meters;	
Installation Method	Support Side-By-Side 1U Cabinet with 2 units	
Size	Product Size: 220*190*45mm; Packaging Size: 560*408*135mm;	
Network Interface	1x1000Mbps Optical Fiber Network Port; 1x1000Mbps Ethernet Port, Supports POE Power Supply;	

SPECIFICATIONS

	Decode	Encode	Decode	Encode
Video Input And Output	1xHDMI 3840*2160@60hz 4:2:0; 1xHDMI back up; Supports Custom Resolution Output;	1xHDMI 3840*2160@60hz 4:2:0; 1xHDMI back up or Loop out	1xHDMI 1920*1200@60hz 4:4:4; （Supports upgrade to 3840*2160@30Hz 4:4:4） 1xHDMI back up; Supports Custom Resolution Output;	1xHDMI 1920*1200@60hz 4:4:4; 1xHDMI back up or Loop out
Video Codec	H264/H265 Decoding; Up to 3840*2160@60hz 4:2:0;	H264/H265 Encoding with Three Streams; Encoding Resolution 1080P/720P/Fd1/Cif; Support Custom Transmission Bit Rate Adjustment Range 128Kbps~100Mbps; Supports Frame Rate Adjustment Range 5~60 Frames;	H264/H265 Decoding; Up to 1920*1200@60hz 4:4:4 ; （Supports upgrade to 3840*2160@30Hz 4:4:4）	H264/H265 Encoding with Three Streams; Encoding Resolution 1080P/720P/Fd1/Cif; Support Custom Transmission Bit Rate Adjustment Range 128Kbps~100Mbps; Supports Frame Rate Adjustment Range 5~60 Frames;
Audio Input And Output	1x3.5mm Headphone Jack In or Out; 1xHDMI Embed Audio Outputs; 1x Line Out;	1x3.5mm Headphone Jack Input; 1xMic Input with Fantasy Power Supply; 1xLine Input; 1xHDMI Embed Audio Input;	1x3.5mm Headphone Jack In or Out; 2xHDMI Embed Audio Outputs; 1x Line Out;	1x3.5mm Headphone Jack Input; 1xMic Input with Fantasy Power Supply; 1xLine Input; 1xHDMI Embed Audio Input;
Audio Codec	Support AAC,G.711a, G.711u, G.722, OPUS Audio Protocol, 48KHz 24-Bit Sampling Rate;			
Video Recognition	Support Automatic Recognition Of EDID, HDCP; Compatible With Progressive Scan P-System And Interlaced I-System Inputs			
Telecommunication	Cross-Network Segment Communication; Support DHCP; Support Rtsp/Rtp Protocol; Support Unicast And Multicast		Cross-Network Segment Communication; Support DHCP; Support Rtsp/Rtp Protocol	

DIAGRAM



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