

Distributed System

BRNet-KE4

Specification sheet



Brief introduction

BRNET-KE4 is a high-performance and cost-effective distributed node developed by our company.

Based on the distributed architecture design of Linux system, it is a decentralized architecture that can achieve any number of scalable nodes without the need for servers and master nodes. Each node is independent and does not interfere with each other, thereby reducing the risk of system operation and reducing maintenance costs. The advantage of this design is that it can better adapt to constantly changing needs without the need for large-scale system refactoring and upgrades.

The silent design without a fan is a very important feature. It can support independent installation of 1U cabinets or install 2 units side by side simultaneously, saving space and improving system flexibility. This design not only provides a more comfortable working environment, but also reduces system energy consumption and maintenance costs.

Suitable for many industries such as government, military, public security, judiciary, transportation, education, maritime, security, electricity, water conservancy, telecommunications, medical, finance, mining area broadcasting, energy, etc., it has been widely used in emergency command centers, command and dispatch centers, airport control, digital cities, digital transportation, digital healthcare, park security, digital buildings, digital construction sites, digital exhibition halls, multimedia conference rooms, lecture halls, and many other places

Functional characteristics

Full information visualization

Signal visualization, scene visualization, audio visual environment status visualization.

Simplify interaction

You can drag and drop the window with your fingers, and support multi touch.

Interface customization

Through the designer, you can freely design interface templates, which are simple to use, WYSIWYG, and support unified deployment of multiple platform interfaces.

Full brand IPC access

Supporting video access from major mainstream camera manufacturers, supporting standard streaming protocols such as ONVIF, RTSP, RTMP, etc., without the need for additional devices, it can be directly decoded for wall and pan tilt control, supporting integration with third-party security platforms, and achieving unified management and scheduling of multiple systems.

Soft KVM function

You can directly control any content of the signal source on the tablet, such as video playback, pause, PPT flipping, etc., making it convenient to explain when you moving.

Intelligent voice interaction

Support voice control signals for up and down screens, scene calls, and control of environmental devices such as lighting and curtains.

Low latency, high image quality

Adopting the H264/H265 international coding standard, combined with innovative image processing algorithms and transmission protocols, the network delay can be controlled within 50ms while ensuring high-quality images.

Inter frame synchronization technology

Unique synchronization algorithm achieves true frame synchronization, with complete and tear free images.

Multi platform compatibility

Supports various operating systems such as Windows, Android, iOS, Kirin, and Ningsi Panshi, with good compatibility, unified interface, and simple operation.

Audio state visualization

Support audio status visualization, can directly control audio switches, volume levels, etc., WYSIWYG

Environmental control

Support visual control of peripheral environmental equipment such as power supply, air conditioning, lighting, etc. The system collects real-time operational status data of various devices and displays them visually through a graphical interface.

One click scene call

Supports unlimited multiple scene saves and calls, allowing for one click access to pre saved scenes, as well as through warning linkage calls, or automatic scene rotation.

Application topology



Application scenarios



Command Center



Conference Center



Digital healthcare

Product specifications

Input resolution	Maximum support 3840x2160@30 , backward compatibility
Encoding performance	Simultaneously supporting 2-way 3840x2160@30fps +2-way 1080P30+2-way D1+2-way CIF
Encoding format	H264/H265
Support Protocol	Supports RTSP, RTMP, and private protocols
Bandwidth occupancy	4M-40M
Frame rate	Support CBR/VBR, input supports adjustable frame rate of 1-30fps, input supports adjustable frame rate of 1-60fps
Network communication	Supports unicast or multicast
Delayed	Delay from input acquisition to output display within 60ms
Synchronicity	Supports synchronization of various LED/LCD screens with synchronization error within 100us
IPC forwarding	Supports forwarding of 4-way IPC signals, i.e. full screen display of IPC signals
Power hot backup	POE and DC 12V adapter power supply hot backup, one party fails, the other automatically replaces
Optical network mutual backup	Supports hot backup communication between optical and network ports, with one line malfunctioning and the other automatically replaced
Video interface	1 HDMI1.4, 1HDMI2.0,one in and one out
Audio interface	Two 3.5mm audio interfaces, one in and one out, one Phoenix LINE IN audio input, one Phoenix LINE OUT audio output, one in and one out
Audio Format	AAC G711U G711A G726 PCM

Network interface	2 RJ45 10M/100M/1000M adaptive Ethernet port, with LINK1 supporting POE power supply
Fiber optic interface	1 SFP optical port
Serial port	1 programmable 232 serial port (Phoenix head) and 1 programmable 485 serial port (Phoenix head), 1 infrared input, 1 infrared output, 1 IO interface (Phoenix head), and 1 RELAY relay interface (Phoenix head)
USB	2-way USB 2.0 HOST, 1-way USB 3.0 HOST, 1-way USB 2.0 supports switching between HOST and DRIVE
Noise	Silent design without fan
Working temperature	10℃-50℃
Working humidity	10%-90% No condensation
Equipment size	214mm*132mm*34mm
Installation method	Install two units side by side in a 1U telecommunications standard cabinet

Information

We declare that our company's products will keep up with the development of technology and continue to improve. The product specifications are for reference only and are subject to change without prior notice. The final interpretation rights belong to our company.