TRICOLOR®

Video Wall

KVM

4K

Audio

TRICOLOR

POWER RUN LINK VIDEO

KLOUD NETWORK UNIT

H.265

Video

IPC

KLOUD™

KLOUD Network distributed system

KLOUD Product introduction

The Kloud series products are distributed network audio and video transmission solutions introduced by chunzhong technology. they adopt the latest HEVC/H.265 high-efficiency video encoding and decoding technology and bring users low bandwidth and high quality audio and video interactive systems. Compared with the common distributed products in the market, the bandwidth required for video transmission is further reduced, and the quality of network video transmission is improved. On the basis of limited bandwidth, large-scale and multi-region audio and video stable transmission is possible. According to the actual needs of users, a complete pure distributed solution is provided, which includes perfect matrix switching function, KVM function and large screen splicing management function. It is widely used in military national defense, airport air traffic control, radio and television, bank finance, energy construction, education and teaching and other industries.

Industry

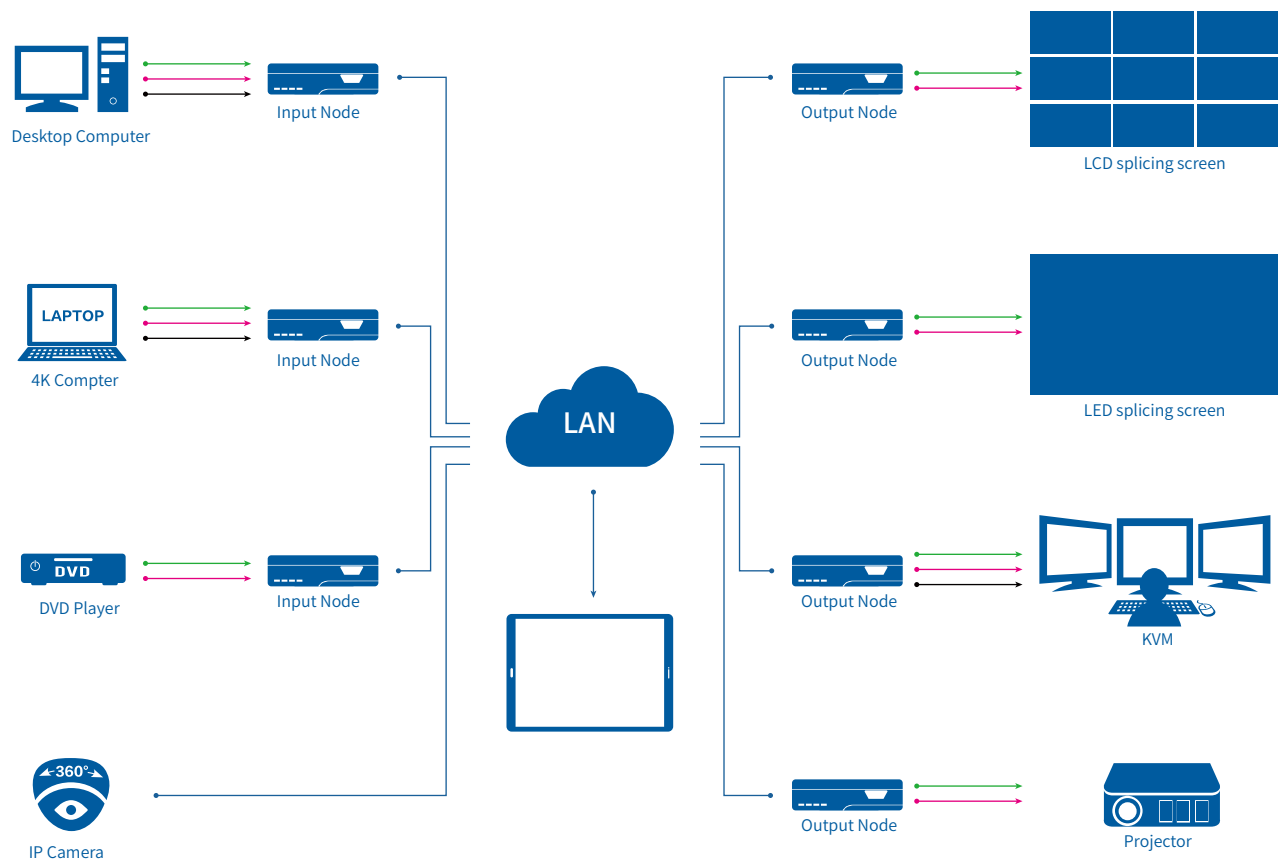| Education | Government | Journalism | Administration | Convention | Exhibition | Security | Sales |

KLOUD Diagram

Desktop Computer — Input Node — Output Node — LCD splicing screen

4K Compter (LAPTOP) — Input Node — Output Node — LED splicing screen

DVD Player — Input Node — LAN — Output Node — KVM

IP Camera — Output Node — Projector

Legend： video signal   Audio signal   Control signal   Control signal

KLOUD Features of system scheme

HEVC/H.265 codec technology

Using the latest H.265 efficient video coding and decoding technology, the network bandwidth required for picture transmission is greatly reduced. Under the same quality, the network bandwidth demand is only 50% of the conventional H.264 transmission mode. Only 2~3Mbps bandwidth is needed to transmit 1 1080P resolution video.
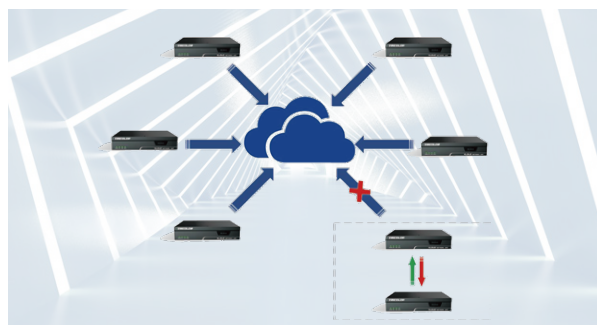

Source preview

The system adopts a pure distributed structure and can realize real-time preview of multiple groups of network videos without adding special hardware equipment. At the same time of centralized management of signal sources, misoperation caused by failure of pre-monitoring of signal sources is avoided.

Mass IP signal access

Compatible with H.265 and H.264 standard format network streams. It supports the docking display of monitoring cameras of different brands with standard code streams such as Onvif and RTSP, and also supports the docking display of various network streaming media devices and third-party security platforms, which facilitates the upgrading and unified management of network systems.

Flexible system layout

The pure distributed system architecture is adopted, and the number of input and output nodes in the system can be freely adjusted. When a single node fails, it has no influence on the whole system link and can quickly replace and maintain the failed equipment.

4K resolution display

Network transmission of 4K video is supported. Support resolution up to 3840*2160, 4 times 1080 resolution, richer details and finer pictures.

Large screen splicing management

The system supports large screen splicing, windowing, roaming, zooming, picture-in-picture and other display forms. It can manage multiple groups of screens with different resolutions at the same time, and supports DLP, LED, projection fusion and other display units.

KVM management function

The system supports perfect KVM management function, and realizes remote real-time control of multiple signal source computers through a set of keyboard and mouse. Through perfect control authority division, signal source push/grab and other functions, cooperation and intercommunication between agents are realized.

Overall system gridding

It adopts the distributed system structure and uses the network as the medium for transmission and management. With the help of network switch, the disadvantage that many different devices must be connected by physical link is solved. Users can manage different devices in the same network conveniently.

KLOUD quipment parameters

Kloud distributed input node

video	Interfaces	1-way video input interface (optional HDMI1.3, SDI, DVI, HDMI1.4)	Distributed input function parameters	Support standard h.265/hevc or h.264/avc encoding
		1-way video ring-out interface, physical interface is the same as video input interface		Support coding rate adjustment, optional variable rate and fixed rate
	Input resolution	1920x1080i@50/60Hz, 3840x2160p@30Hz, 1920x1200p@60Hz, 1920x1080p@30/50/60Hz, 1280x720p@50/60Hz, Common Resolution in backwards compatibility		Support TCP, UDP, unicast / multicast and other transmission modes
				Support character overlay function, which can overlay time, character and other information
Audio	Audio input	3.5mm audio interface/female interface		Support RTSP, gb28181 and onvif protocol
	Audio looping out	3.5mm audio interface/female interface		Support USB signal access and KVM management through network
	Reverse audio output	3.5mm audio interface/female interface		Support web configuration management
Network	physical interface	1 RJ45 interface		Support real-time preview function of signal source
	Encoding mode	H.265/HEVC or H.264/AVC		Support online upgrade
	Ethernet rate	1000Mbp/s		Support 7 * 24-hour uninterrupted operation
transmission	USB	1 USB type B female interface		

Kloud Distributed output node

video	Interfaces	1-way video output interface (optional HDMI1.3, SDI, DVI, HDMI1.4)	Distributed output function parameters	Support standard h.265/HEVC or h.264/AVC automatic decoding
	Input resolution	1920x1080i@50/60Hz, 3840x2160p@30Hz, 1920x1200p@60Hz, 1920x1080p@30/50/60Hz, 1280x720p@50/60Hz, Common Resolution in backwards compatibility		Support plan saving and plan patrol
				Support RTSP, gb28181 and onvif protocol
Audio	Audio input	3.5mm audio interface/female interface		Support mouse and keyboard control, and realize KVM management through network
	Reverse audio output	3.5mm audio interface/female interface		Support OSD menu operation, and realize signal source switching, push, grab and other functions
Network	physical interface	1 RJ45 interface		Support large screen splicing management function, and support window opening, splicing, zooming, roaming, picture in picture and other display modes
	Encoding mode	H.265/HEVC or H.264/AVC		Support single screen, 16 pictures and arbitrary window display
	Ethernet rate	1000Mbp/s		Support web configuration management
transmission	USB	2 USB type B female interface		Support online upgrade
				Support 7 * 24-hour uninterrupted operation

General specification

control	TCP/IP	1 RJ45 interface, shared with network interface	other	working temperature	0℃~40℃
	RS232/RS485	One 5pin Phoenix terminal		ambient temperature	10%~90%
	IR	One 3pin Phoenix terminal		Power specification	12V, 3.3A
Physical specifications	wide	210mm (8.27inch)		Power consumption of equipment	less than 25W
	high	43mm (1.69inch)		Cabinet installation	Special tray installation
	deep	166mm (6.54inch)		weight	1kg (2.2lb)

Joint command
Widely used in troops, armed police, public security, the new command and dispatch mode

Convenience meeting
Flexible Coordination Organizations in the Region

Information sharing
Inter-building multi-area video information interconnection, real-time monitoring, convenient for unified management

TRICOLOR® Beijing Tricolor Technology Co.,Ltd.

POWER YOUR PERFECTION