

Phinx

PHINX Distributed & Visualized Fiber KVM System

≤2ms

KVMs

4K@60

444

Excellent Connectivity
& Collaboration

WHO WE ARE

Leader

- Leader of all-in-one distributed LED/LCD video wall control and KVM technologies in China.

Forerunner

- Forerunner of fully automated dust-free SMT workshop plus high-speed placement testing equipment in the industry.

Practitioner

- Practitioner to commercialize the all-in-one distributed video wall control and KVM solution with AI technologies on large-scale projects.

AVCiT Profile

Guangdong AVCiT Technology Holding Co., Ltd. provides Integrated IP Based KVM Solutions and Distributed Fiber KVM Matrix System for Command & Control Room, with revolutionary technologies which greatly add more value to your Meeting and Control Room Design.

With 3 marketing centers, more than 23 offices, sales and service network around the world. AVCiT Technology assists the army to set up Joint Operations Center for mission-critical tasks, builds Security Operations Center for smart cities, establishes an efficient, transparent and unblocked information system for Air Operations Centers, and builds Emergency Operations Center for disaster prevention authorities. Meanwhile, innovations for Network Operations Center are made, and more value are created for varieties of industry.



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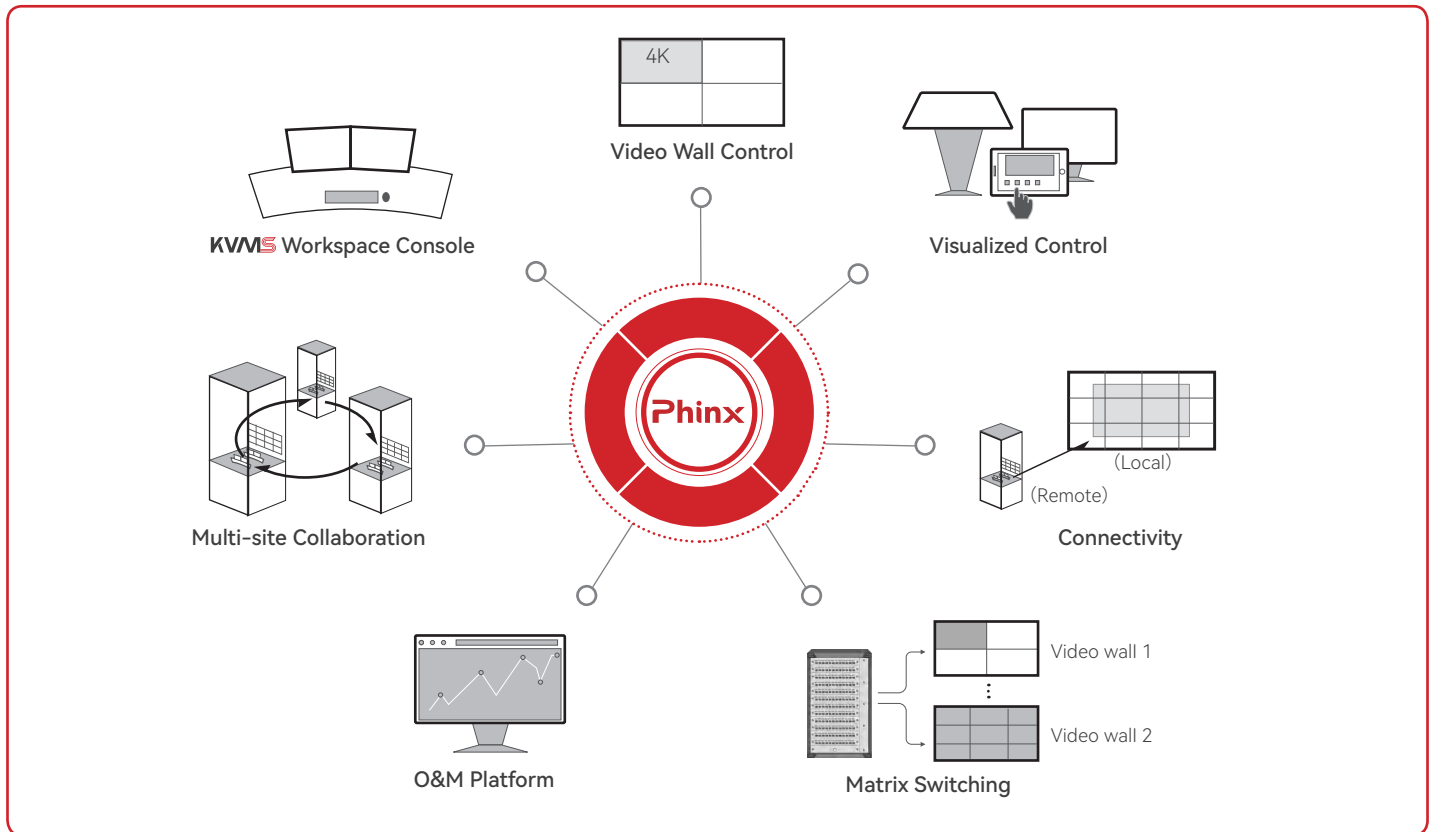
Phinx

System
Introduction



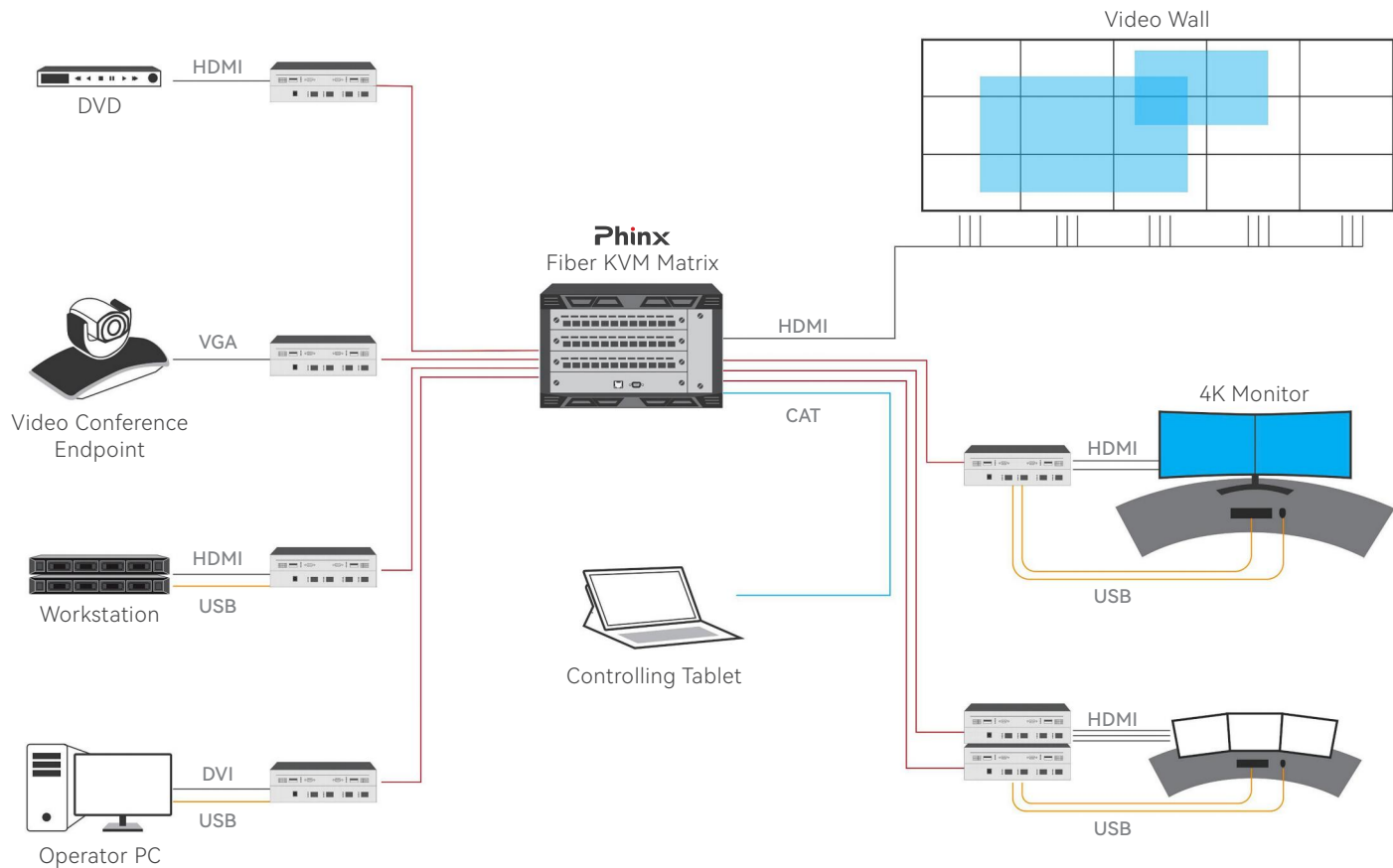
Solution Overview

Phinx Fiber KVM Collaboration System (non-IP) is based on distributed and scalable architecture with optional features and different host channels, which can be configured as a KVM matrix, KVM Switch, KVM extender, video wall controller or all of them in same system. Benefit from its high stability & full redundancy performance and pixel perfect image quality with nearly zero latency, the solution is value added for control rooms, TOC, AOC in transportation, energy, aviation industries.



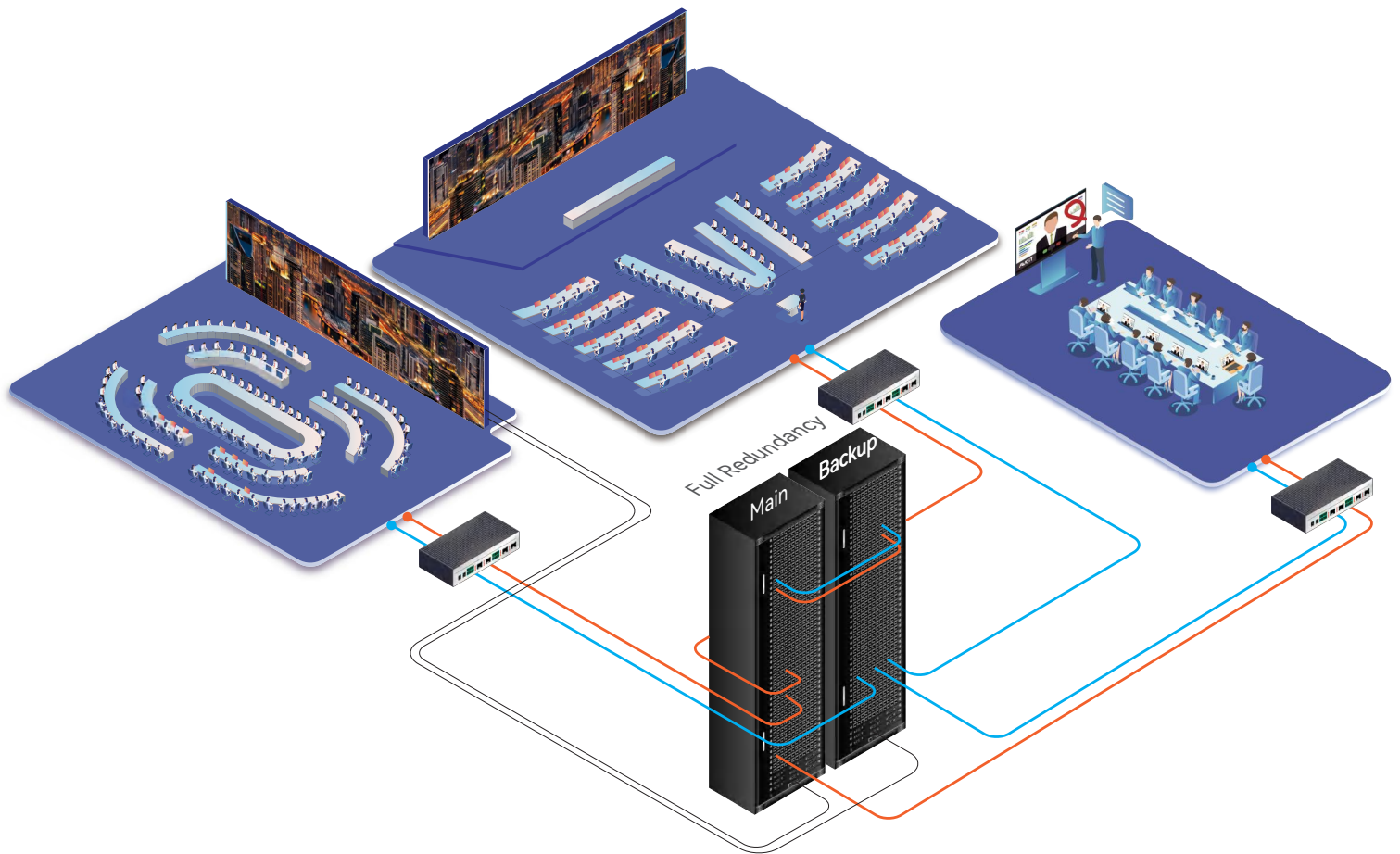
Distributed Architecture (NON-IP)

- Based on FPGA, transmit uncompressed image over fiber optic;
- Optional KVM host with dynamic SFP I/O port design, each port can be user-configured as an input or an output by plug & play;
- Distributed computing technology, no need for the additional server to process signal.

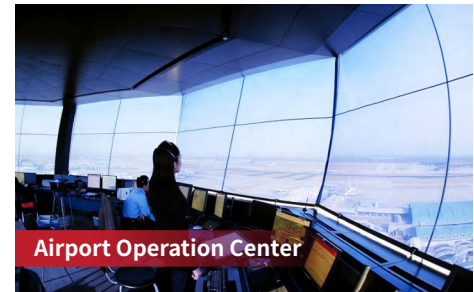


High Stability & Full Redundancy

Benefiting from preventive strategies and nanosecond monitoring, **Phinx** can realize 7x24 non-stop operation with full redundancy for each channel, the failure channel will be taken over automatically.

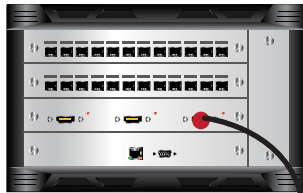


Applications



+ MORE

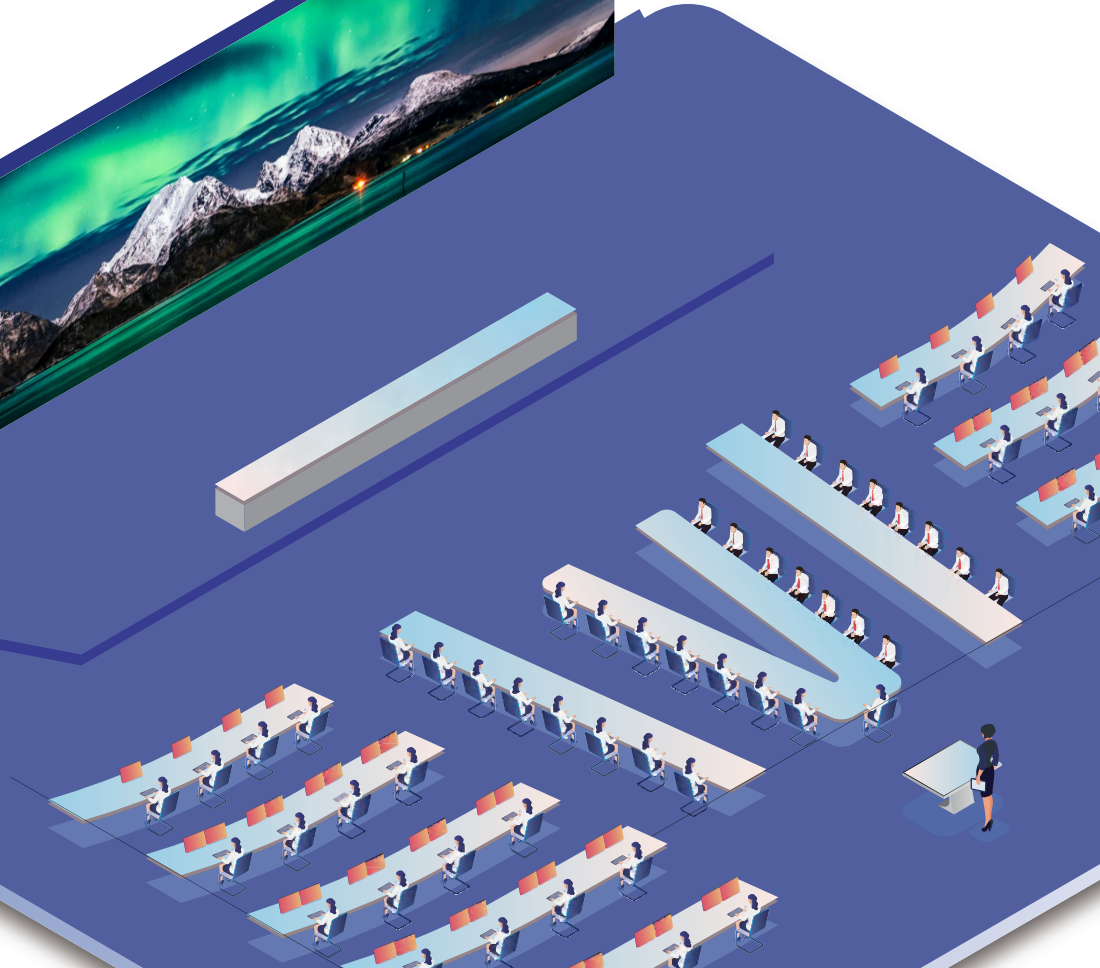
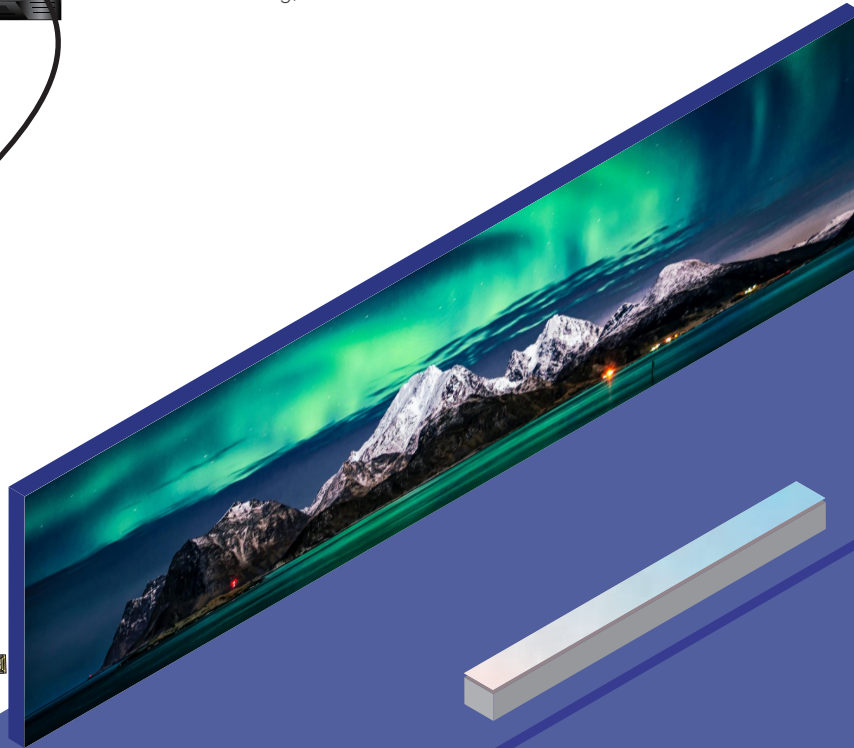
Pixel Perfect Image Quality



Phinx

- High bandwidth up to 12G for each channel;
- Ultra-high resolution, up to 4096*2160p;
- Support 4K@60 **4:4:4** in original image quality;
- Seamless switching, neither black screen nor flash screen.

HDMI



Extreme User Experience by Nearly Zero Latency

To minimize the fatigue and maximize the efficiency of operators, **Phinx** achieves a point-to-point latency of less than **2ms**, fixing the inaccurate mouse pointing and mouse drifting due to latency. It gives user a great experience, which is the same as the local computer mouse.



Phinx

Dynamic KVM Control
& Collaboration



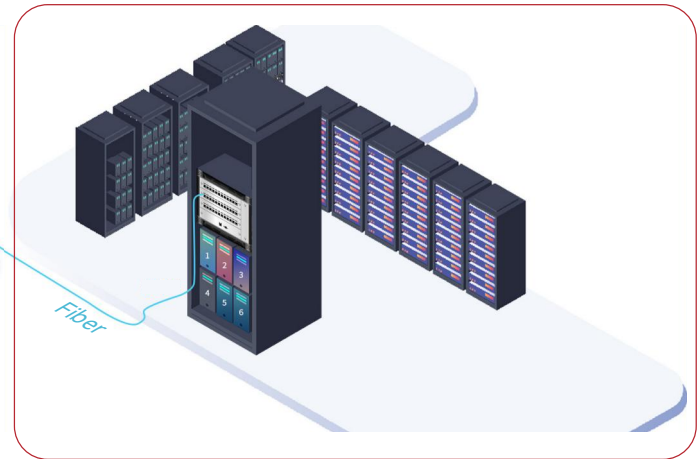
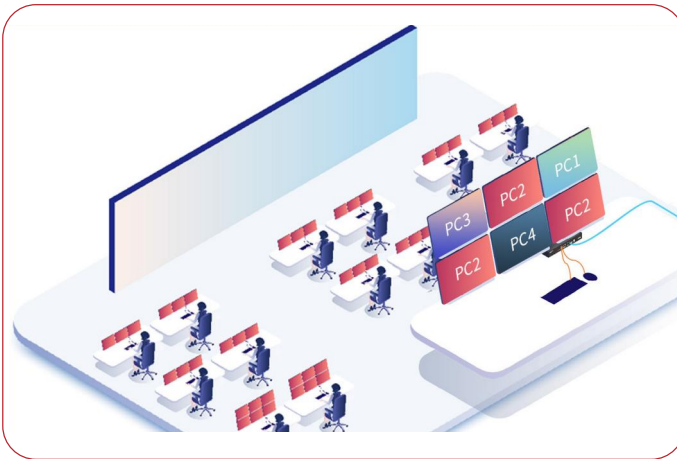
Dynamic KVM Control and Visualized Collaboration

An extreme experience with user-friendly OSD UI and connectivity among sources, operators, and video walls. Operators have no latency feelings when they access and control the PC remotely, GET/PUSH/MULTI-VIEW feature allows them to manage the system and collaborate with high efficiency.



Optimized Operator Environment

Workstation PC can be separated from the workplace and stored in the data center where they are safe, and air-conditioned, so that heat and noise emissions in the office can be eliminated.



Dynamic Workplace

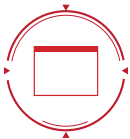
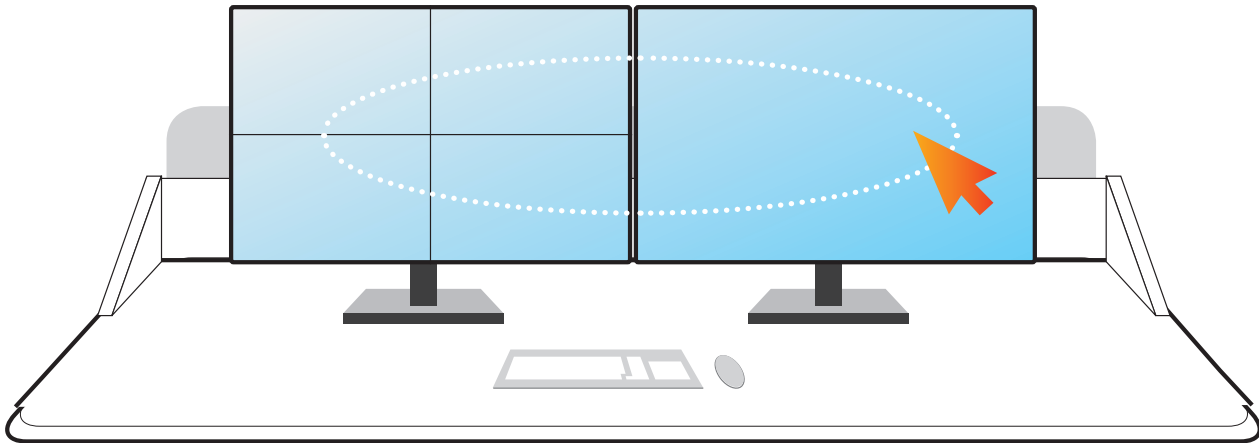
- Equip multiple monitors and a set of keyboard & mouse for workplace console, operator can log in at any workplace to get access & control the source remotely on any connected monitors.

Mouse Cross Monitor Switching

- The operator can switch and control between PCs intuitively just by moving the mouse cursor from one monitor to another. Monitor with OSD mouse cursor will be marked by the red box.

High Efficient KVM & Multiview Control

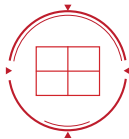
The operator can access up to 4 sources/computers simultaneously on a single monitor by dynamic multi-view layout, such as quad view, and each quad view computer can be fastly projected to a connected monitor seamlessly.



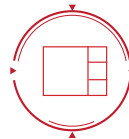
FULL VIEW



PICTURE IN PICTURE



QUAD VIEW



FOUR VIEW



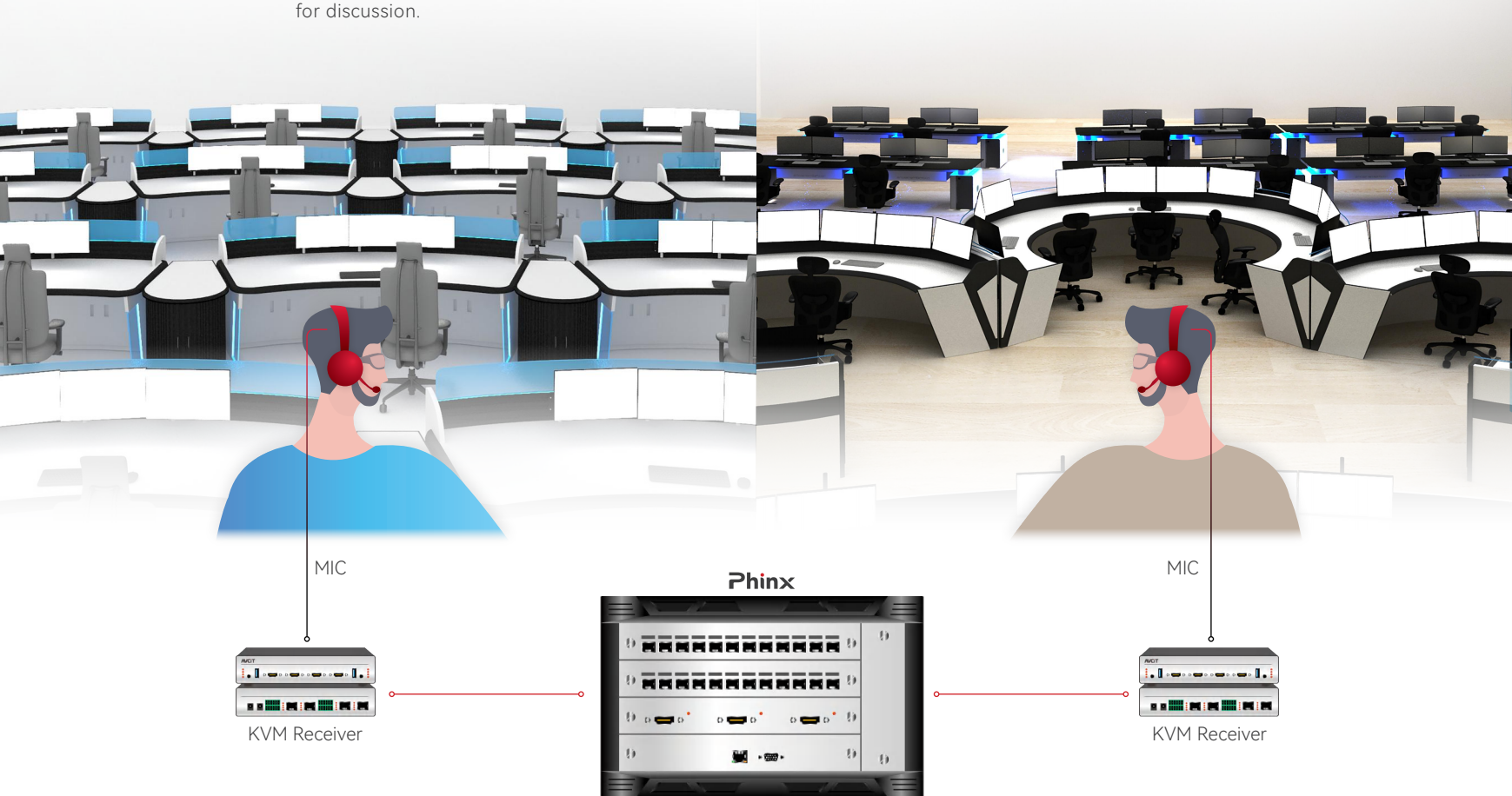
ZOOM IN/OUT

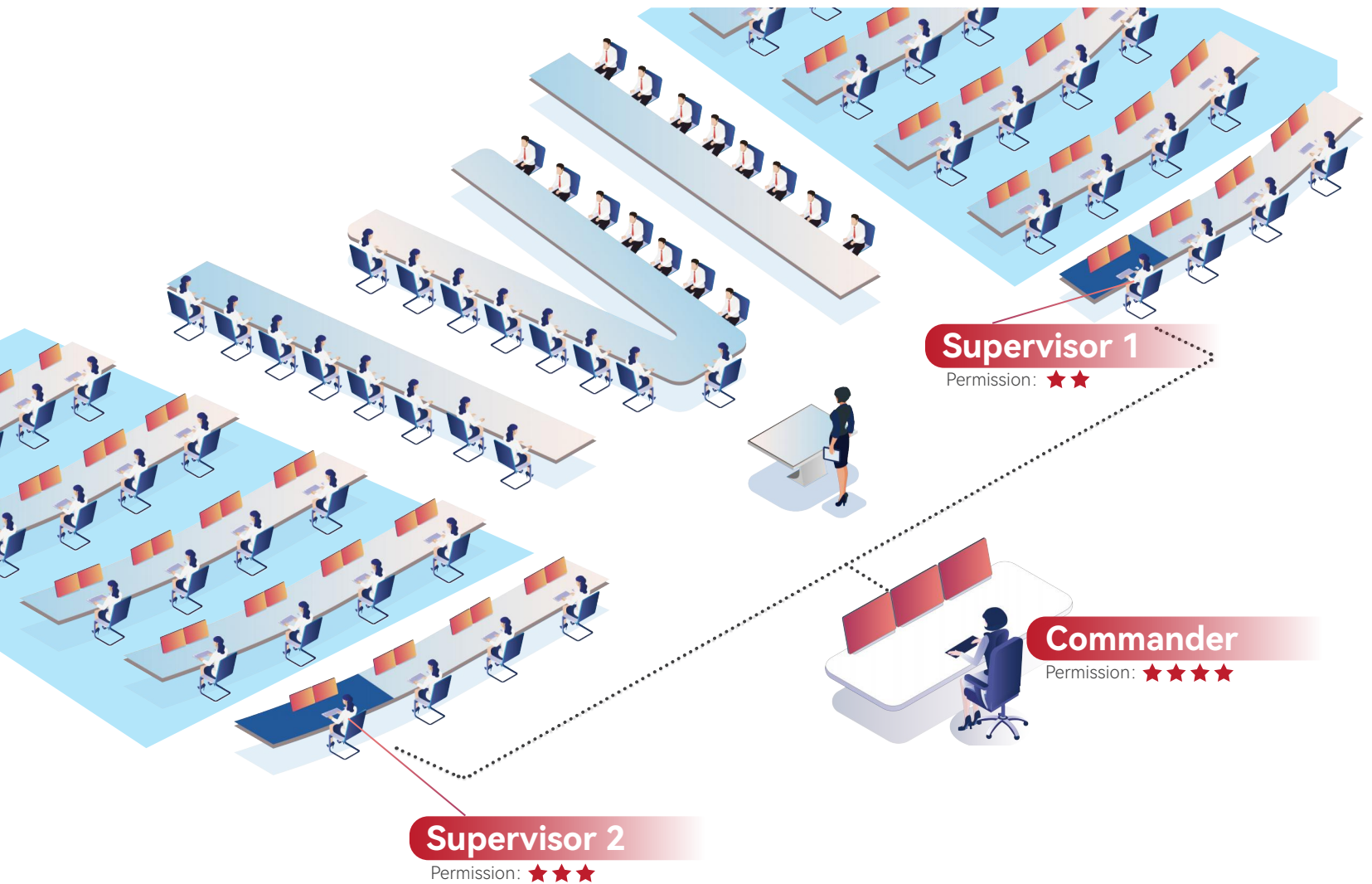


CROSS MOUSE

Visualized Collaboration

The operator can get access to any source by extremely seamless switching via hot-key on OSD and intuitively collaborate between operators by PUSH feature, sharing the PC content and audio call feature for discussion.



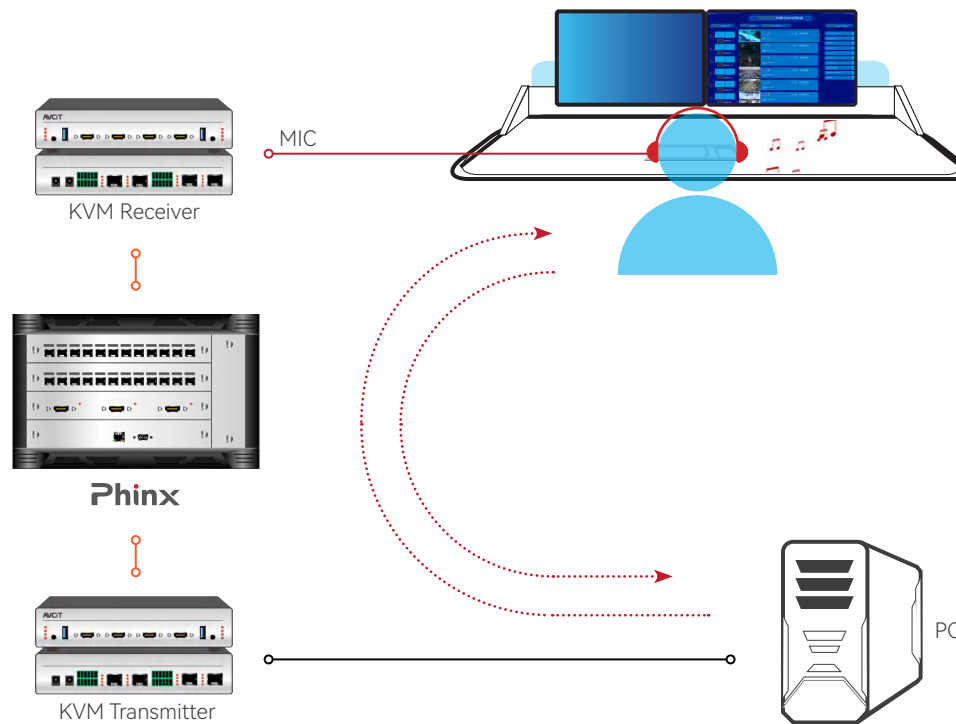


Flexible Permission Assignment

Users are created by the administrator on OSD, who has full permission to control all the computers/sources. Each user is configured with a type of access permission to each PC.

Bidirectional Audio Transmission

The audio could be transmitted between **Phinx** KVM Transmitter and Receiver in two ways so that the operator inserts his headset into KVM Receiver when he operates the conference software on the PC.



Secure USB Data Transmission

Phinx allows the operator to access and control the relative workstation by OSD and just insert a USB disk at the monitor's KVM receiver if he needs to read the USB disk or U-Key data from the workstation mounted at the data center.



USB Disk



Ukey



Hard Disk



IDE/SATA



Printer



K & M



CA Verify



Fingerprint
Scanner



USB
Camera

Phinx

Intuitive
Video Wall Control



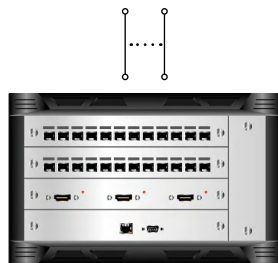
Customized User-Friendly Interface

The user interface can be fully customized in different layouts, languages and icon according to client requirements.

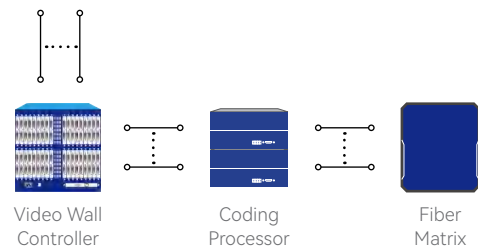


Powerful Video Wall Processing

Support different kinds of LED/LCD/DLP walls in accurate image sync and without image dislocation for even high FPS video.



Phinx



Solution by other brands



Intuitive & Visualized Video Wall Control

What you see is what you get, operator can preview all the source content and video wall content on the visualized UI, ensuring the correct source can be always switched to the video wall intuitively.

Source Management & Fastly Search

Collect and manage massive signals in the favorite folder and support fuzzy searching, quickly matching the required content in a large number of signals.

Scenario Preset & Recall

Multiple scenarios can be preset and recalled seamlessly, such as video wall layout displaying, specific content highlighting, and video distributing.



Ultra High-resolution Management

Support to display source with multiple-head GPU by **8K**, **16K**, and **32K** resolution, which could be processed and merged as a whole image to display on video wall pixel by pixel.



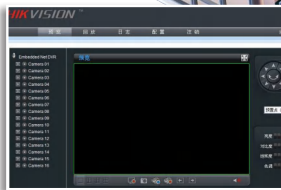
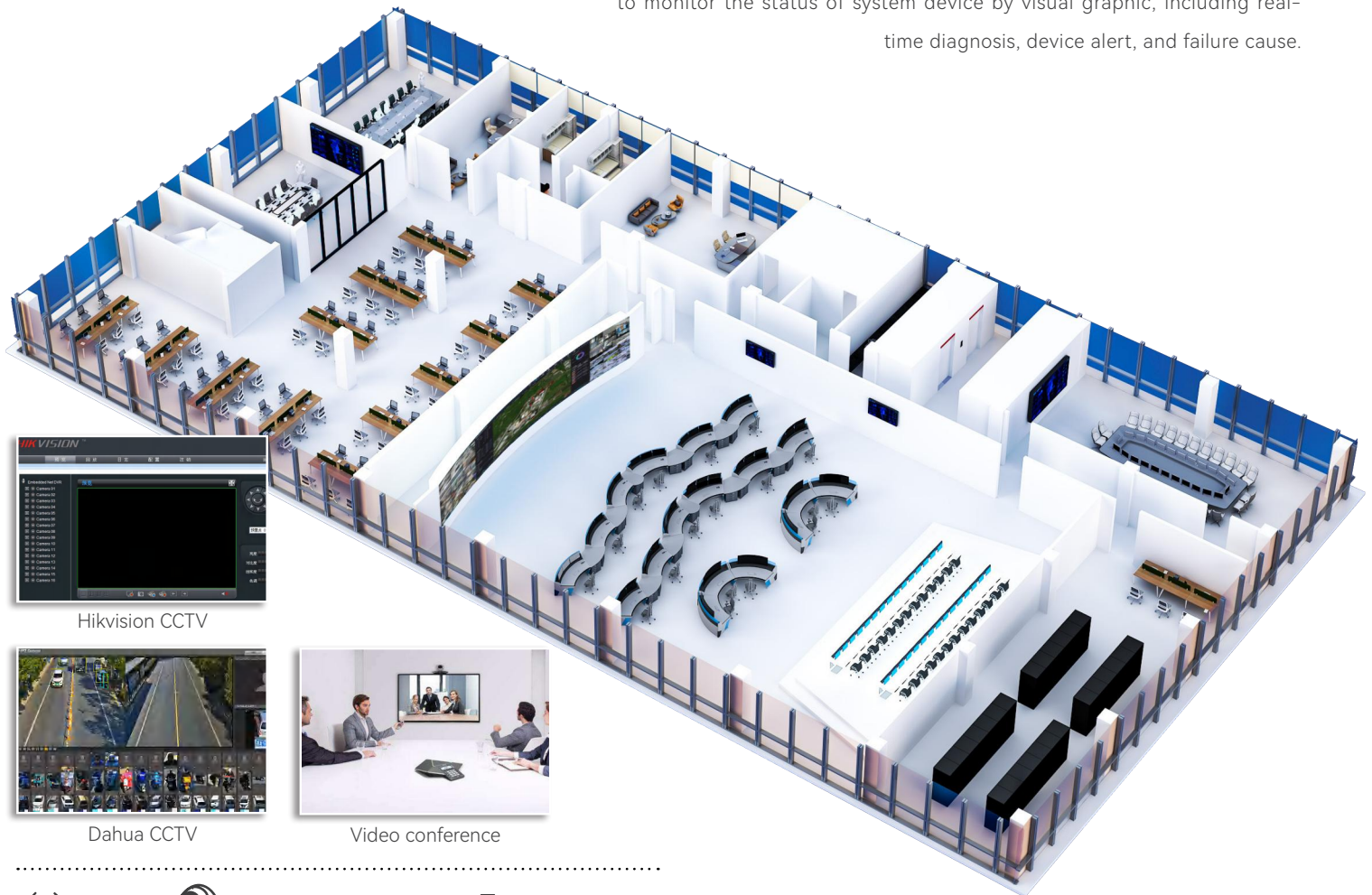
Visual O&M Platform

Phinx system status could be monitored and showed by visual graphic interface in real time, including device online, offline, SFP I/O port activity, user quantity, user logs etc. It's also flexible to configure the system and update the firmware dynamically and intuitively.



SNMP Support

Phinx could be integrated with a third-party system via SNMP, available to monitor the status of system device by visual graphic, including real-time diagnosis, device alert, and failure cause.



Hikvision CCTV



Dahua CCTV



Video conference



Drone



Amplifier



Curtain



Lighting





Chassis of PHINX Host					
Height	6U	10U	17U	20U	NA
Slots for SFP I/O Module	3	6	12	24	48
Maximum Channel	36	72	144	288	576
Protocol	Ethernet, RS232				
PSU	Redundant PSU				

PRODUCT NAME	PICTURE	VIDEO IN	VIDEO OUT	USB	RS232	RS485	IR/IO	AUDIO	SFP	POWER
4K HDMI KVM Transmitter		HDMI x2	/	2	2	2	4	2 IN	4	2
4K DVI KVM Transmitter		DVI x2	/	2	2	2	4	2 IN	4	2
4K HDMI KVM Transmitter with Loop Port		HDMI x2	HDMI Loop x2	2	2	2	4	2 IN	4	2
4K DVI KVM Transmitter with Loop Port		DVI x2	DVI Loop x2	2	2	2	4	2 IN	4	2
4K HDMI KVM Receiver		/	HDMI x2	2	2	2	4	2 MIC	4	2
4K DVI KVM Receiver		/	DVI x2	2	2	2	4	2 MIC	4	2

PRODUCT NAME	PICTURE	FEATURES DESCRIPTION
Video Wall Control Module		• Structured Cards, plug and play, no need any other configuration management; • Each channel can support Max 4 windows multiviewing; • Each window can support Max 4x4K overlapping of any size; • Resolution is scalable.
SFP I/O Module		• I/O Module Card with 12 SFP port and auto recognizable feature, could be connected with KVM TX or KVM RX by plug & play; • Data Transmission: audio, video, keyboard & mouse and control signals.

. For more details, please visit www.avcit.com

References



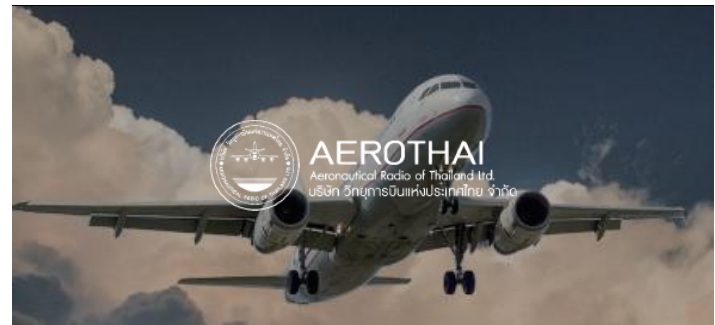
Beijing Winter Olympic Games 2022



United Nations Conference on Biodiversity(COP15 Kunming)



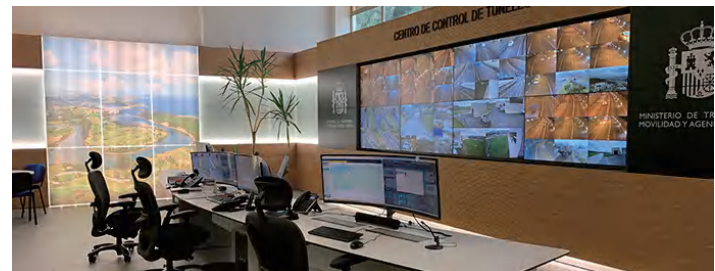
Changi Airport Operations Center Singapore



AeroThai SMC ROOM (System Monitor and Control)



Israel Subway



Matinsa Traffic Management Command Center, Spain



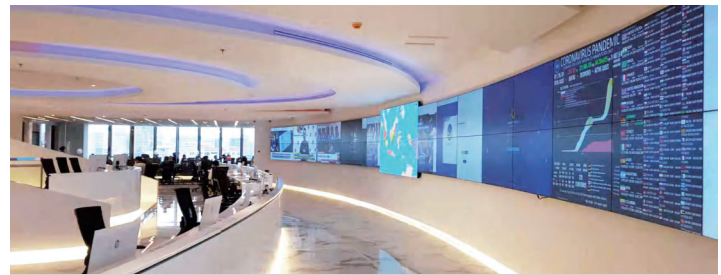
Jurong Port Integrated Command Centre, Singapore



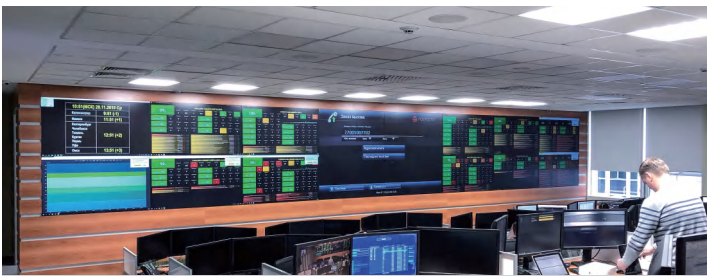
Marina Property Control Center, Singapore



Cyber Security Centre, University of Technology, Malaysia



Government Emergency Operations Centre in Jakarta



Sberbank Trading Floor, Russia



RV Jakup Sverri Command Center, Denmark



IOC for Ipoh City Council Malaysia



Network Operation Center(NOC) for National Bank of Kuwait



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