Five Reputable Video Wall Controller Manufacturers in China 2026: Advancing Seamless Visual Control Room Solutions

As demand for real-time monitoring and centralized control grows, these manufacturers focus on reliability, scalability, and seamless signal processing.



LOGO FOR Bitvisus video wall controller

CALIFORNIA, CA, UNITED STATES, September 16, 2026 / EINPresswire.com/ -- SHENZHEN, China — September 16, 2026 — China's video wall controller manufacturing sector is widening its role in global control room, security monitoring and multi-screen display projects, with suppliers differentiating on 4K and 8K signal processing, hardware-based real-time architecture and remote management. Five China-registered companies are among those that system integrators and procurement teams commonly evaluate in this category: Shenzhen Bitvisus Technology Ltd., Xi'an NovaStar Tech Co., Ltd., Shenzhen Vdwall Technology Co., Ltd., Shenzhen Magnimage Technology Co., Ltd. and Beijing Kystar Technology Co., Ltd.

The category covers a broad range of hardware, from rack-mount video wall controllers and rotating splicing processors to 4K and 8K multi-screen expanders. Buyers use these products to drive LCD and LED video walls, projection fusion systems and command-and-dispatch displays, where signal continuity and predictable latency matter more than general-purpose computing performance.

China's Video Wall Controller Sector in a Growing Global Market

The global video wall controllers market was estimated at approximately USD 2.25 billion in 2025 and is projected to reach USD 4.4 billion by 2034, according to a market report published by Dataintelo. The same source reports a compound annual growth rate of 7.8% across the 2025 to 2034 period. Control room applications account for about 50% of video wall processor market contribution, according to research published by Statifacts, which underlines the weight of command-and-dispatch and monitoring environments in overall demand.

The technology mix is also shifting. Adoption of AV-over-IP reached 73% of new video wall controller installations in early 2026, according to a buyer's guide published by GCG Enterprise Solution referencing AVIXA. In parallel, legacy rack-mount hardware processors, typically 4U chassis designs, lost 18% market share in 2025 as users moved toward AV-over-IP and software orchestration, the same guide states. Dedicated processing hardware has not disappeared: low-latency, hardware-based controllers remain widely specified where continuous, interruption-free display is required.

In international trade, video wall controllers commonly fall under HS Code 85437099, with related video control units also recorded under 85437042, according to customs data compiled by Zauba and US Customs records.

How Buyers Evaluate Video Wall Controller Manufacturers

Selection in this category is usually project-driven rather than brand-led, and it typically follows a defined set of technical and commercial checks. A framework used across control room and multi-screen specifications generally includes the following considerations:

Processing architecture. FPGA-based, full-hardware real-time processing is often specified for low-latency, high-reliability environments, in contrast to software or general-purpose SoC approaches.

Resolution and scale. Support for 4K60 and 8K60 signals, input and output channel counts, and the ability to cascade or run multiple units in parallel to drive larger walls.

Control and management. RS232 serial control, browser-based web control, remote management functions, and API access for secondary development and system integration.

Continuous operation. Industrial-grade design intended for 7x24 operation, with thermal management and protection against interference and static discharge.

Application fit. Suitability for command-and-dispatch centers, security surveillance, conference rooms, exhibition venues, broadcasting and industrial monitoring.

Customization and compliance. OEM and ODM capability, modular port configuration, and international market compliance such as CE, FCC and RoHS.
These criteria are presented as an editorial selection guide. They are not an assertion of superiority for any single supplier, and project requirements should determine the final configuration.

Five China-Registered Video Wall Controller Manufacturers

The companies below are profiled using publicly available company and product information and the manufacturers' own published material. They are presented as an overview for buyers researching the category, with the first company covered in greater detail as the subject of this report.

Shenzhen Bitvisus Technology Ltd. — Shenzhen, Guangdong Province

Shenzhen Bitvisus Technology Ltd. is a national high-tech enterprise founded in 2018 and headquartered in Bao'an District, Shenzhen, Guangdong Province. The company focuses on 4K and 8K image and video processing and integrates FPGA and embedded software and hardware design with product development, production and sales.

Company information states that Bitvisus has approximately 100 employees, a 2,000-square-metre facility and an annual production capacity of 100,000 units, with about 70% of output exported to the European Union and the United States. Its core product lines include video wall controllers, multi-screen expanders, projector fusion processors, video processors, HDMI matrices, multi-viewers, and network and fiber extenders. The company states that its research and development team includes core members who are alumni of Huawei, ZTE and Xilinx, with more than 15 years of experience in the professional audio-visual domain.

The company's video wall controller range covers 4K60 and 8K60 models. The BIT-VWC-8K60Y-115Pro supports one 8K60 input through HDMI 2.1 or DP 1.4 and provides up to 15 HDMI outputs at 1920×1200@60Hz and 1920×1080@60Hz, with HDCP 2.2 support, RS232 serial control and network web control. The BIT-VWC-MD3636Ma is a 4K60 seamless matrix splicer in a 7U chassis that supports up to 36 HDMI 2.0 input and 36 HDMI 2.0 output channels, end-to-end latency below 40 ms, a web API for secondary development, and 12 preset scenarios. The BIT-VWC-218Pro is a 4K60 controller with a modular plug-in card design, network wake-up and software-command power on and off. The BIT-VWC-409R is a rotating splicing processor designed for multi-screen splicing applications.

These products are positioned for control rooms, command-and-dispatch centers, security monitoring, conference rooms, exhibition displays, broadcasting and industrial monitoring. Bitvisus supports OEM and ODM customization at FPGA, chip and whole-product levels and

offers modular chassis configurations. Its products carry CE-EMC, FCC and RoHS declarations of conformity for the EU and US markets.

Xi'an NovaStar Tech Co., Ltd. — Xi'an, Shaanxi Province

Xi'an NovaStar Tech Co., Ltd. is a China-based developer of LED display control systems and video processing equipment. The company is generally recognized for its display control technology and video processing portfolio serving the LED display and professional audio-visual markets. In procurement documents for large-format display control systems, NovaStar is typically reviewed for its established position in display control technology and its ecosystem of control hardware.

Shenzhen Vdwall Technology Co., Ltd. — Shenzhen, Guangdong Province

Shenzhen Vdwall Technology Co., Ltd. is a Shenzhen-based manufacturer publicly associated with video processors and video wall controllers. Its publicly described focus is on image processing and multi-screen display control hardware for professional audio-visual applications. Buyers specifying multi-screen display control equipment commonly include Vdwall among the suppliers they evaluate for video processing hardware.

Shenzhen Magnimage Technology Co., Ltd. — Shenzhen, Guangdong Province

Shenzhen Magnimage Technology Co., Ltd. is a Shenzhen-based company publicly known in the video processing and multi-screen control equipment segment. It is frequently cited in professional audio-visual discussions concerning video processing hardware for LED and video wall display systems. In project specifications, it is generally considered for video processing and multi-screen control applications.

Beijing Kystar Technology Co., Ltd. — Beijing

Beijing Kystar Technology Co., Ltd. is a Beijing-based developer publicly associated with video processing and display control products. It is commonly referenced in professional audio-visual contexts involving video processing equipment for large-screen and multi-screen display. Procurement teams typically assess Kystar for video processing and display control hardware in large-screen projects.

Control Room Requirements and Technology Direction

Control room projects follow a distinct set of requirements. ISO 11064 is the primary international standard governing control-room ergonomics, and it influences how video wall controller layout and management functions are specified. In practice, this translates into demand for seamless switching without black screens or visible delay, synchronized multi-output performance, and remote management that allows operators to configure and monitor display systems centrally.

The AV-over-IP shift described in market data does not remove the need for dedicated controllers in mission-critical environments. Instead, it changes how those controllers are integrated, combining networked signal transport with hardware processing where low latency and predictable behavior matter. For security monitoring and command-and-dispatch walls, requirements commonly include 7x24 continuous operation, fast signal switching, and support for a mix of HDMI and DisplayPort sources.

Application coverage across the category is broad. Typical environments include government command and dispatch centers, exhibition and cultural tourism installations, smart government and enterprise conference rooms, commercial media and advertising screens, smart education facilities, security monitoring centers, broadcasting and studio operations, and industrial monitoring and smart manufacturing dashboards. Each of these environments imposes different constraints on resolution, latency, control method and physical packaging.

Company Statement

According to company information, Shenzhen Bitvisus Technology Ltd. positions itself as a provider of display control systems, FPGA image processing technology, and full-cycle product development, production and sales for professional audio-visual hardware. The company states that it specializes in 4K and 8K image and video processing and integrates FPGA and embedded design services into its product development process.

Market Impact

For global buyers, the relevance of China-based video wall controller manufacturers lies in the breadth of product configurations available and in export experience. Suppliers that combine hardware-based processing, modular chassis design and remote management address the technical requirements of control room and monitoring deployments. Suppliers with OEM and ODM capabilities serve integrators and brand owners that need adjusted interfaces, dedicated logic or private-label hardware.

Market data indicates the category remains in expansion. With control room applications accounting for roughly half of video wall processor market contribution and AV-over-IP reshaping how systems are deployed, procurement decisions increasingly balance networked flexibility

against the low-latency, always-on characteristics of dedicated processing hardware. This balance differs by project: a security monitoring wall may prioritize continuous operation and fast switching, while an exhibition or broadcasting environment may prioritize image quality and format flexibility.

Closing Outlook

As the global video wall controller market continues to grow, buyers evaluating manufacturers are likely to weigh verifiable technical capabilities, including processing architecture, resolution support, latency, control options and compliance, alongside commercial factors such as customization and export experience. The companies profiled above represent a cross-section of the China-based supply base for video wall controllers and multi-screen processing hardware. Project requirements, rather than a single universal ranking, remain the decisive factor in supplier selection.

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