

MC8K Pro

Multimedia Server

Specification V4.0



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1 Update Record

Document version	Release time	Update history
V4.0	July 15, 2025	first release

2 Product Introduction

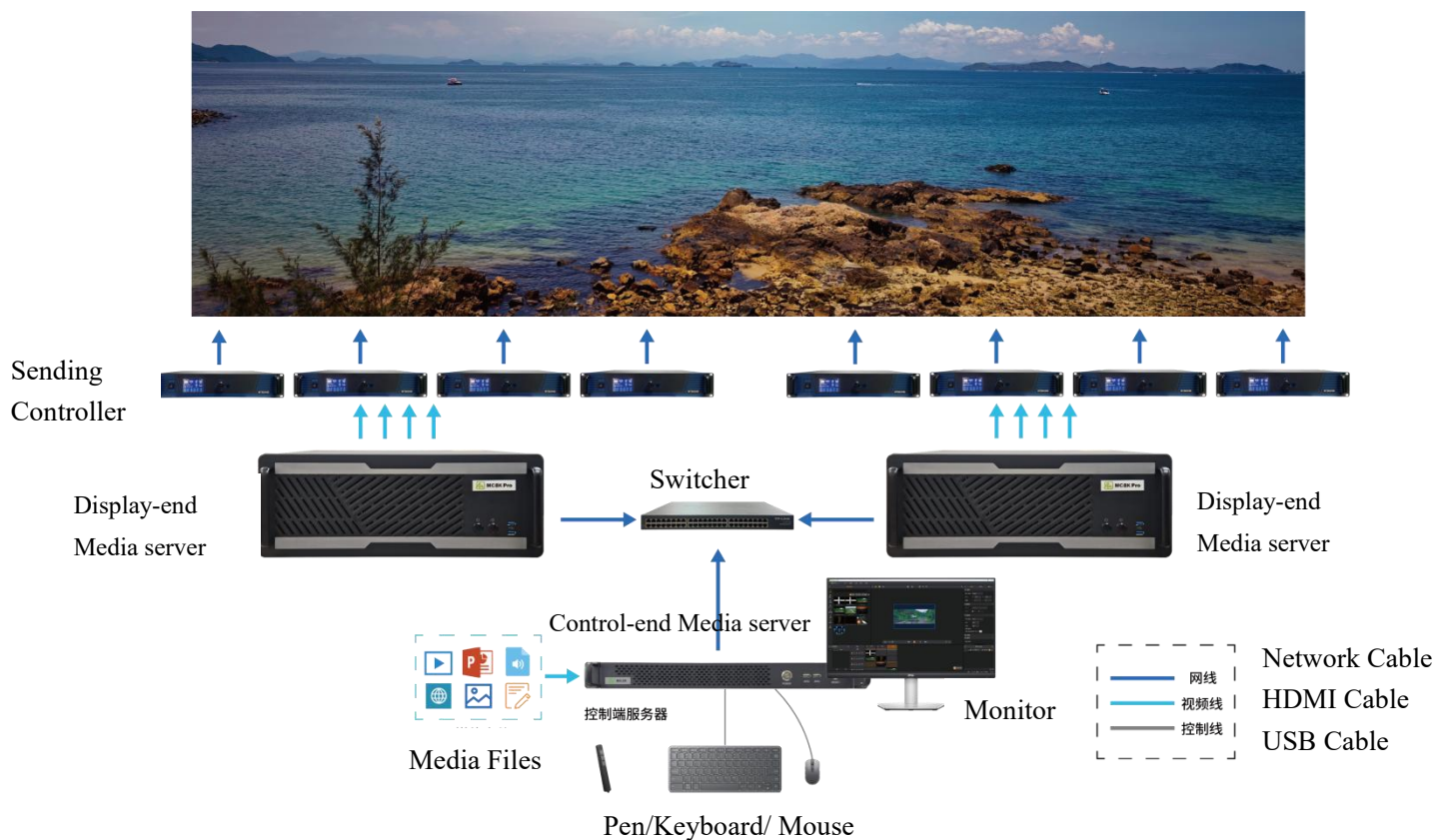
MC8K Pro Multimedia Broadcasting Control Server adopts high-performance processors and professional-grade industrial motherboards, supporting 4-channel 4K@60Hz video output. Integrated with professional media playback control software, it enables batch management and independent control of multiple LED displays. A single unit can connect to and output video mapping to screens of various resolutions, while supporting multi-unit cascade synchronization for pixel-to-pixel display on ultra-large screens. It also accommodates irregular-shaped splicing screen configurations.

3 Product Features

- Supports 4-channel DP1.4 video output interfaces, each interface supports 4K@60Hz output
- Supports batch management and independent playback control for different LED displays
- Enables arbitrary image segmentation/recombination, geometric deformation, and rotation to accomplish splicing displays of various shapes and angles
- Compatible with mainstream video formats including but not limited to: Hap, HapQ, Hap Alpha, H.264 encoded MOV/AVI/MP4, etc.
- HAP format: Maximum support for 20Gbit bitrate and 16K*8K@60fps video playback
- H265 support: Standalone playback at 8192 * 8192@24/25/30/50/60fps
- Audio channel support: 5.1/7.1/7.2 digital audio formats including stereo, Dolby, PCM, DTS, etc.
- Supports differential and asynchronous display of no less than 500 signals including videos, images, U3D applications, UE4 applications, NDI, RTSP, capture cards, etc.
- Allows saving multiple slice projects with seamless switching via control systems
- Supports conversion of standard video to CAVE perspective effects

- Supports HDR video playback
- Features auto-start configuration and unattended timed activation mode
- Automatically loads project files and initiates playback upon startup
- Supports master/slave server modes with compatibility for third-party control consoles
- Eliminates complex BIOS settings - physical switch for power-on/power-off after power recovery
- Default support for Wake-on-LAN without additional configuration

4 Application Scenarios



5 Product Appearance

Front Panel

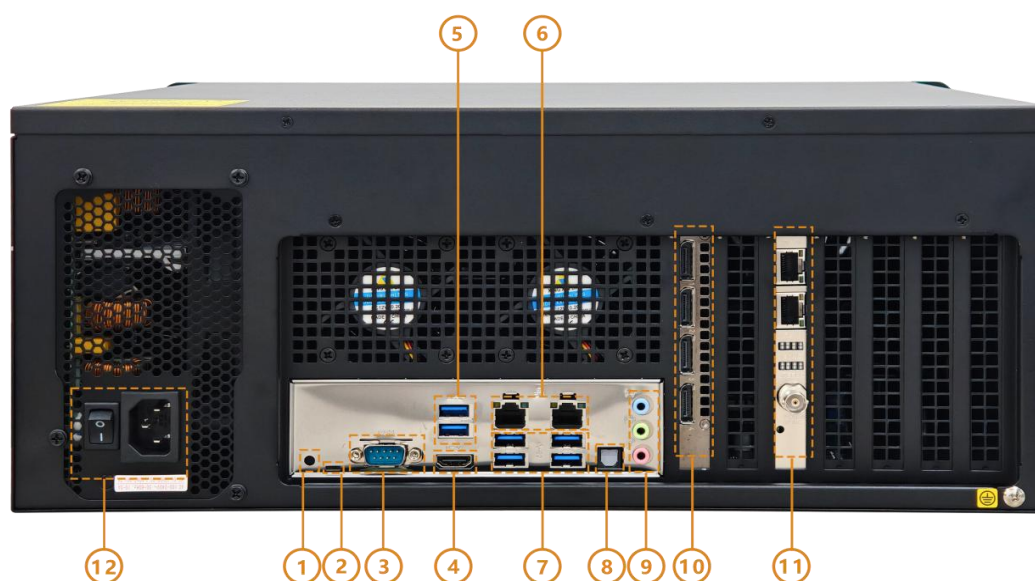


*Product images are for reference only. The actual product shall prevail upon purchase.

5.1 Interface Illustration

#	Name	Illustration
3	Power Restart	Restart the server device
1	Power switch	Switch server device
2	USB	2 × USB 3.0 interface

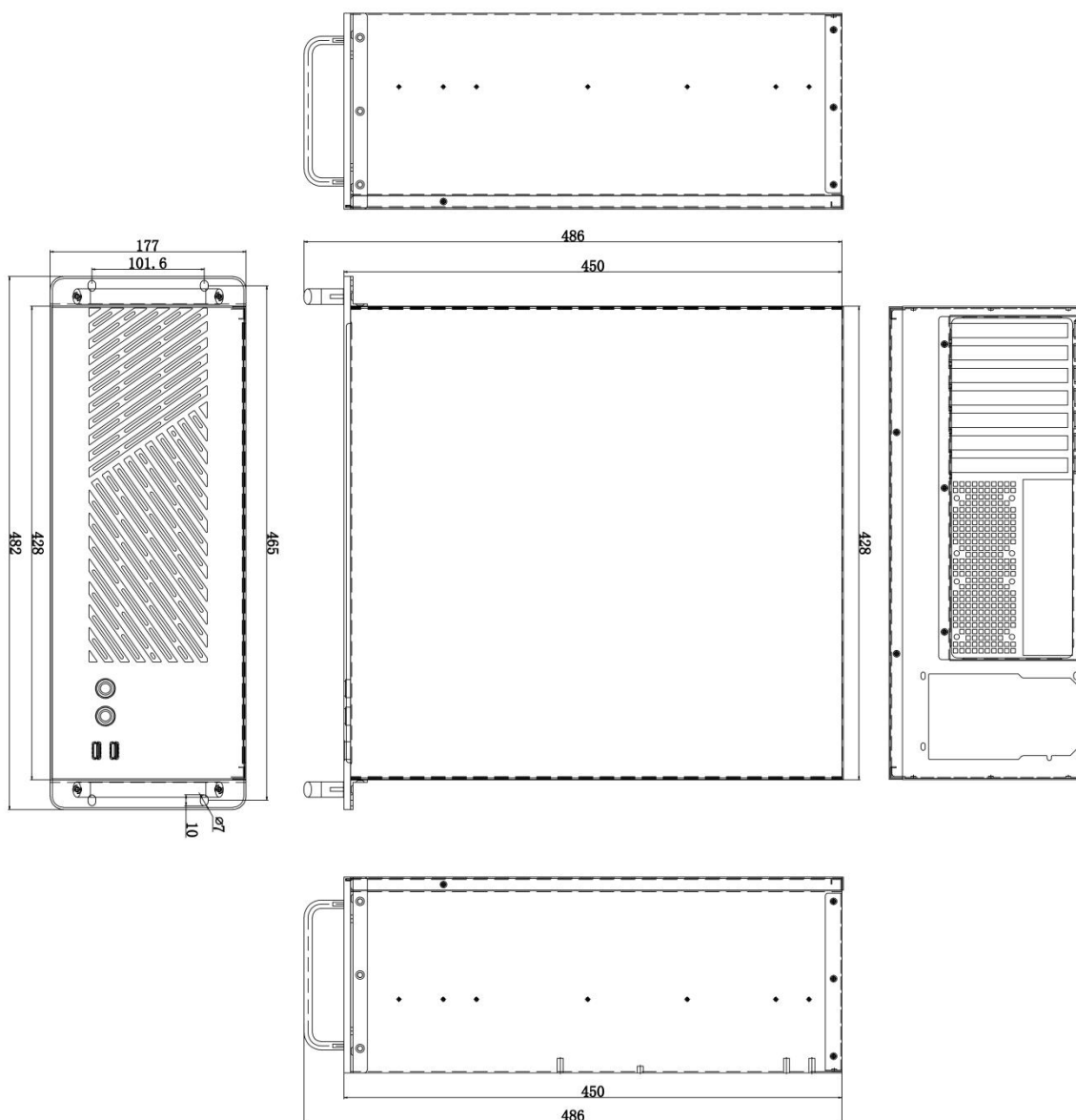
Rear Panel



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#	Name	Illustration
1	BIOS Reset	One-Click BIOS Restore
2	Power-On Reset Switch	Power-On Auto-Start Switch: Slide left to disable, slide right to enable
3	COM	Industrial Control Interfaces
4	HDMI	1× HDMI 2.0 output port, supporting 3840×2160@60Hz resolution
5	USB	2×USB 3.0 ports, supporting USB 3.0 Gen2x1 (10Gb/s)
6	LAN	2×RJ45 Gigabit Ethernet ports
7	USB	4×USB 3.0 ports, supporting USB 3.0 Gen2x1 (10Gb/s)
8	Audio Jack	Optical audio port, supporting 5.1, 7.1, 7.2 digital audio transmission
9	Audio Jack	Left and right channels, audio input/output
10	DP	4×DP 1.4 output ports
12	Power Supply	AC 100-240V power input port
11	Synchronization Card	Quadro Sync II Synchronization Card

5.2 Product Dimensions



Tolerance: ± 0.3 Unit: mm

6 Product Parameters

6.1 Basic Parameters

Product Name	Multimedia Server (Integrated Control and Display)
Product Model	MC8K Pro
Hardware Output	DP1.4 × 4
Graphics Card	NVIDIA Professional Graphics Card
Synchronization Card	Quadro Sync II Synchronization Card
Capture Card (Optional)	HDMI/SDI Interfaces
CPU	Intel 8-Core 16-Thread Processor
Memory	16GB DDR4 RAM
Hard Drive Capacity	1TB M.2 High-Speed SSD
Power Supply	650W Power Supply
Chassis	4U Industrial Server Chassis
Broadcast Control Software	M2 Broadcast Control Software

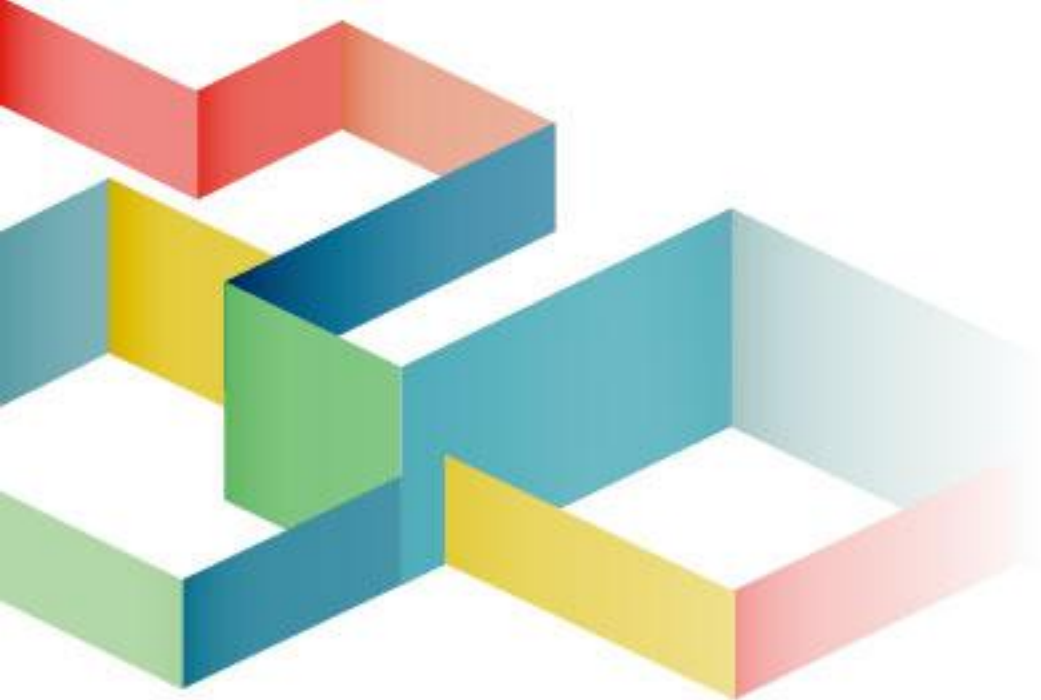
6.2 Specifications

Electrical parameters	Rated voltage	AC-100-240V-50/60HZ
	Rated power	650W
Working environment	Operating temperature	0°C~+40°C
	Working humidity	0%RH~80%RH, non-condensing
Storage environment	Storage temperature	-10°C~+60°C
	Storage humidity	0%RH~95%RH, non-condensing
Chassis size	482mm×486mm×177mm	
Net weight	11.8Kg	
Packaging information	Outer box size	615mm×565mm×275mm
	Accessories	1 × power cord, 1 × certificate, 1× Broadcast Control Software Dongle

*Current and power consumption may vary depending on factors such as product usage, environment, and settings.

7 Precautions

- High voltage hazard: This product operates at AC 100V~240V.
- Do not allow liquids or metal fragments and other conductive materials to enter the device, to prevent safety accidents.
- Please use the device in a dry and clean environment



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