

MVP8K-D

8K Expansion Board

Specification V4.0



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1 Update Records

File Version	Release Time	Release Record
V4.0	2026-2-27	First Time

2 Product Introduction

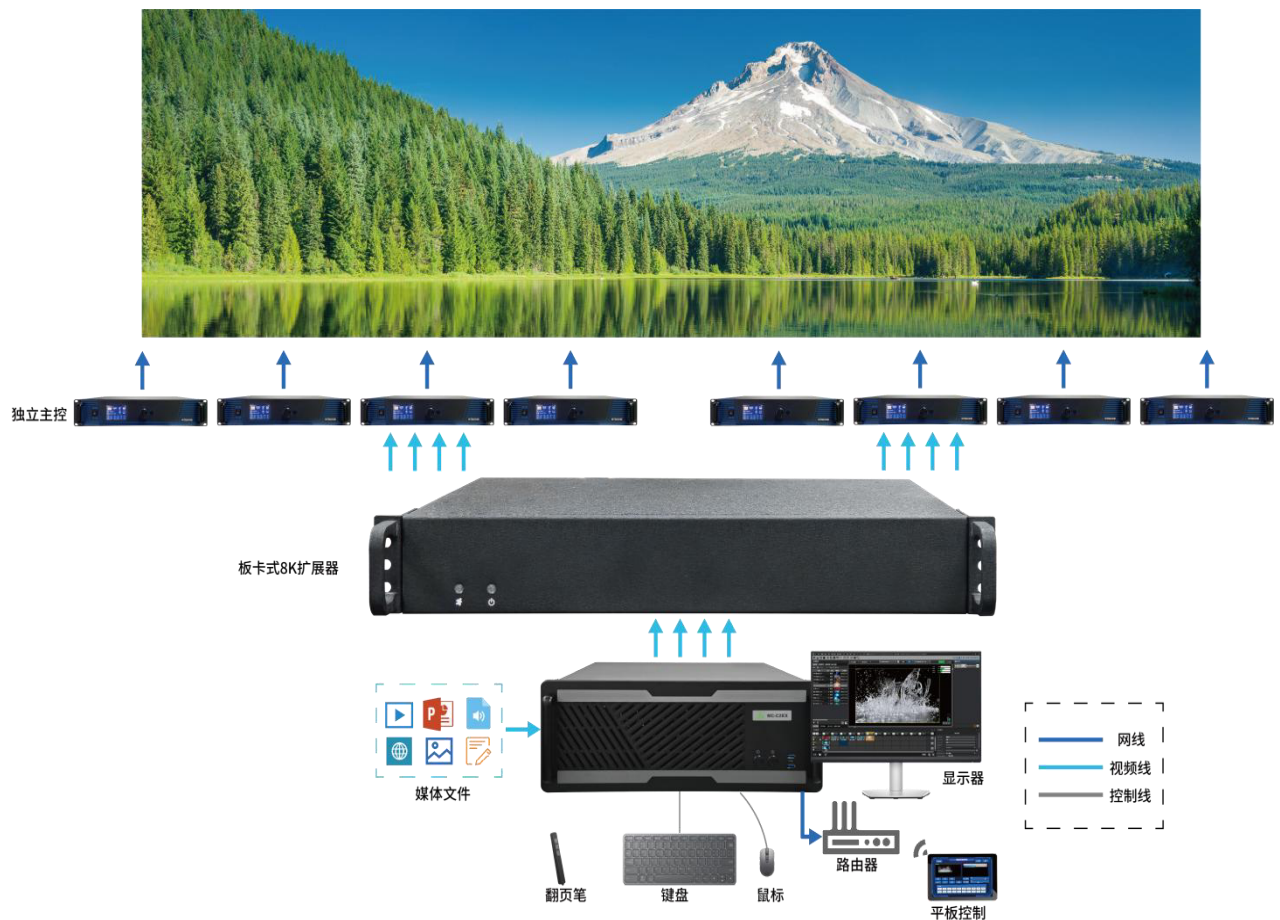
The MVP8K-D card-style 8K expander is an external processing device designed to enhance multi-display output from a computer graphics card, supporting the splitting and expansion of single or multiple Ultra HD signals to multiple display outputs. This product series features a wide range of interfaces, diverse expansion options, and optimal ESD protection, making it suitable for a variety of application needs.

3 Product Features

- Ultra-HD DP 1.4, 8K input
- Ultra-low latency in the microsecond range, with all outputs strictly synchronized
- 4K60 output, supports 2K120Hz high-refresh-rate output
- Both input and output are RGB 4:4:4, with no loss of native pixels
- Supports network/serial multi-module management and open API
- Conductive heat dissipation design with ESD protection, ideal for demanding engineering environments
- Supports hot-swapping, lower system operating temperatures, and 24/7 operation
- Supports flexible custom output configurations, fully compatible with LED display systems on a point-to-point basis
- 8K input ultra-high-definition bandwidth processing capability
- Expands to 8 channels of 4K60 output with a single graphics card. Fully leverage the maximum potential of the graphics card's single-port interface, unlocking its full capabilities and eliminating the need for multiple graphics cards for media display, thereby significantly enhancing the computer's media output capabilities.

- 4K/2K+ high-refresh-rate output capability, with support for HDMI 2.0 output. High-performance output, fully compatible with LED transmission and 4K display systems
- Flexible custom output capabilities
- Supports custom output for non-standard resolutions and refresh rates, suitable for ultra-high-resolution LED applications
- Audio output support
- Supports lossless HDMI audio pass-through
- High-reliability industrial-grade design
- Combines conductive heat dissipation with rack-mounted management and enhanced ESD protection, making it ideal for demanding engineering environments; supports hot-swapping

4 Application Scenarios



5 Product Appearance

Front Panel



*Product images are for reference only; the actual product you receive may vary.

5.1 Data Interface Illustration

#	Name	Illustration
1	Indicator light	Status Indicator light

Rear Panel

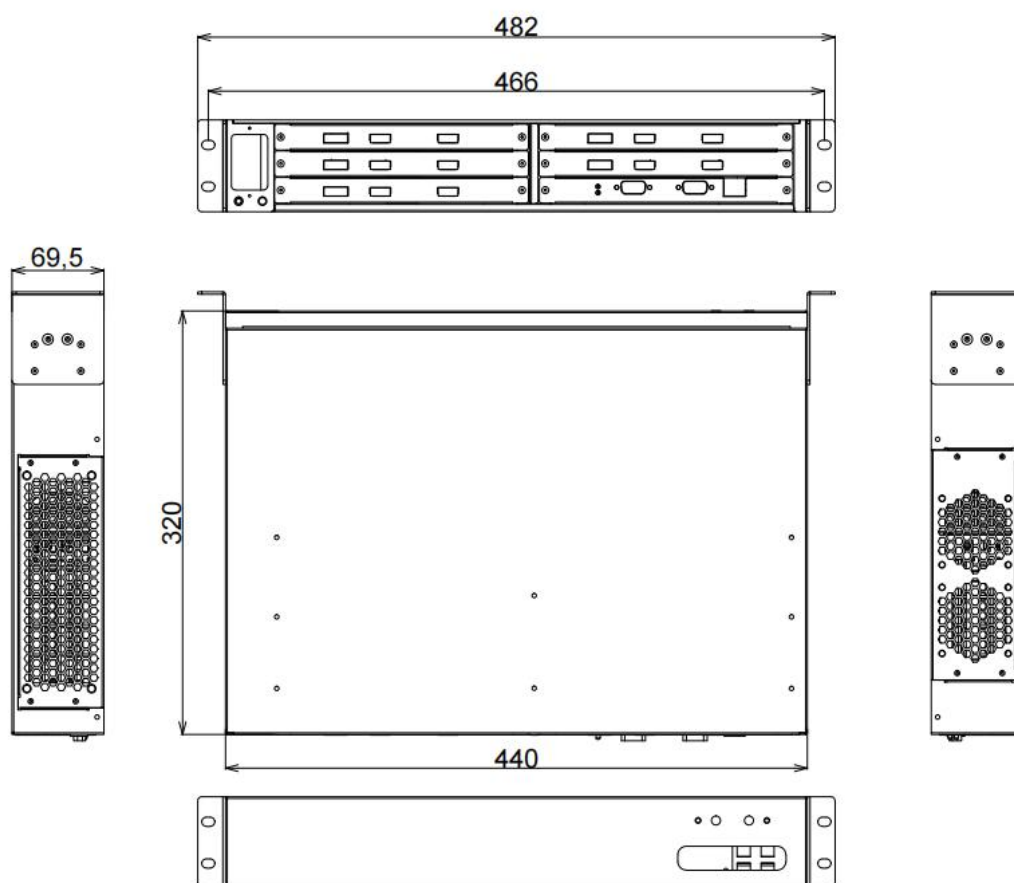


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#	Name	Illustration
1	DP4K/8K IN	4×DP4K/8K Input Interface, Max Resolution 7680*2160@60Hz

	HDMI OUT	16×HDMI1.4/8×HDMI2.0Input Interface, Max Resolution 3840*2160@60Hz 4 HDMI output groups, each with 4 HDMI 1.4 ports and 2 HDMI 2.0 ports Split-1-to-2 mode: Only the HDMI OUT1/4 and HDMI OUT4/1 ports can be used in each group. Maximum width per port: 4096 Maximum height: 7680
2	RS232	RS-232 serial port, supports serial loop-through
3	NET	Ethernet debugging port
4	Power Supply	AC 100–240 V power input port

5.2 Product Dimensions



Tolerance: ± 0.3 Unit: mm

6 Product Parameters

6.1 Basic Parameter

Product Name	Rack-Mounted 8K Ultra-High-Definition Expansion System
Product Model	MVP8K-D
Input Ports	DP1.4 (Channels 1–4)
Typical Input Resolution	7680x2160@60Hz/7680x2400@50Hz/8192x2048@60Hz/7680x1200@120Hz
Output Ports	8*HDMI 2.0
Typical Output Resolution	3840x2160@60Hz/3840x2400@50Hz/4096x2048@60Hz/1920x1200@120Hz
Image Processing Performance	4:4:4 lossless processing, hardware-accelerated real-time processing, professional-grade clock recovery technology, low-latency processing mode
Key Features	Screen splitting with 1x2, 1x3, or 1x4 output Supports 8K input and 4K or 2K+ high-refresh-rate output Supports HDMI audio output Supports custom resolution output
Device Management	Ethernet/serial port management, supports serial loop-through, supports open management protocols, and centralized management of multiple cards

6.2 Specification

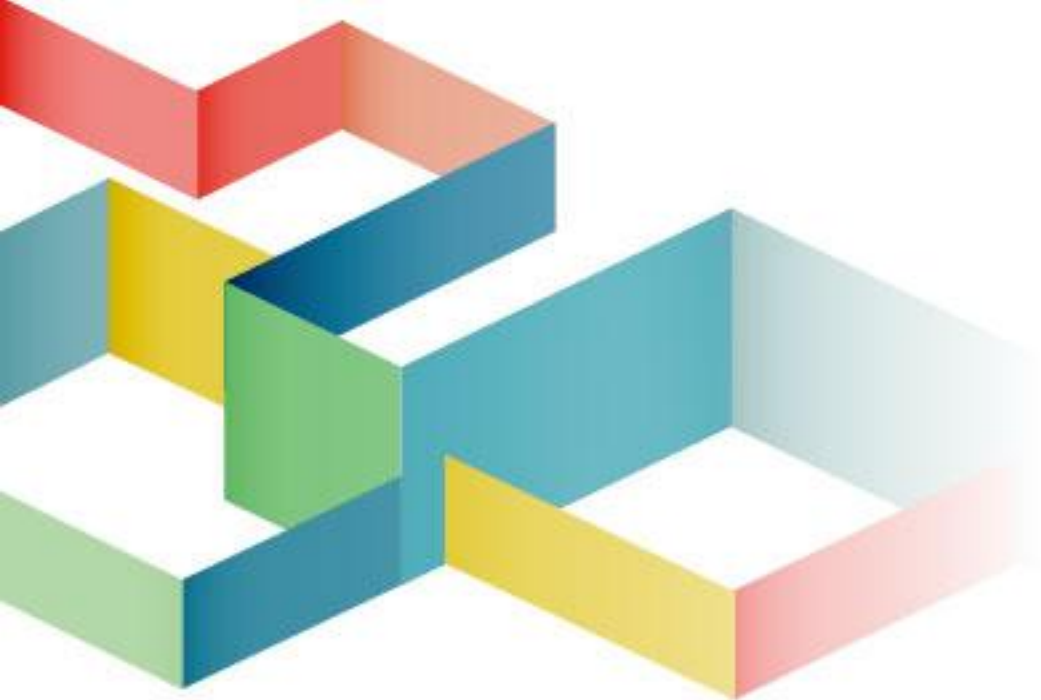
Electrical Specifications	Input Voltage	AC-100-240V-50/60HZ
	Rated Power	90W
Operating Environment	Operating Temperature	0°C~+50°C
	Operating Humidity	15%RH~85%RH Non Condense
Storage Environment	Storage Temperature	-10°C~+60°C
Dimensions	482mm×320mm×69.5mm	
Net Weight	6.5Kg	

Packaging Information	Outer Package	570mm×450mm×185mm
	Accessory	1× power cord, 4× 8KDP cables, 1× certificate of conformity, 1× Ethernet cable
	Gross weight	9.05kg Note: Includes accessories and packaging materials

*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 an AC voltage of 100–240 V.
- Do not allow conductive objects such as liquids or metal fragments to enter the device to prevent safety hazards.
- Please use the device in a dry, clean environment.



National after-sales service hotline: 400-881-3531

Official website: www.mooncell.com.cn.

Address: Mooncell Building, No.3 Industrial Zone, Baoshi South Road, Shiyan Street, Baoan District, Shenzhen

