

# MC8K

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## ALL-IN-ONE LED MEDIA SERVER

MEDIA PLAYBACK | DISPLAY CONTROL



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## SECTION 01

## REVISION HISTORY

| DOCUMENT VERSION | RELEASE DATE  | REVISION DESCRIPTION             |
|------------------|---------------|----------------------------------|
| V4.0             | July 15, 2025 | Initial document release         |
| V4.1             | June 3, 2026  | Interface specifications updated |

## SECTION 02

## PRODUCT INTRODUCTION

The MC8K is an all-in-one LED media playback and control server built around a high-performance processor and a stable industrial motherboard. It provides four 4K @ 60 Hz video outputs. Used with professional media playback and control software, it supports batch management and independent playback control for multiple LED displays. A single MC8K can map outputs to displays with different resolutions.

## SECTION 03

# PRODUCT FEATURES

- Provides four Mini DisplayPort 1.4 video outputs, each supporting up to 4K @ 60 Hz.
- Supports batch management and independent playback control for different LED displays.
- Supports arbitrary image slicing and recomposition, geometric warping, and rotation for displays with different shapes and viewing angles.
- Supports mainstream media formats, including MOV, AVI, and MP4 files encoded with HAP, HAP Q, HAP Alpha, H.264, and other common codecs.
- Supports window-mode and timeline-mode playback with no stated limit on program-scene count.
- Supports loop playback, hold-last-frame behavior, and program jumps.
- Supports fade-in and fade-out transitions between programs.
- Supports scheduled playback through timed tasks.
- Supports PowerPoint playback and slide control using a presentation remote.
- Supports NDI, RTSP, and capture-card inputs; HDMI/SDI capture cards are optional.

### 3 PRODUCT FEATURES (CONTINUED)

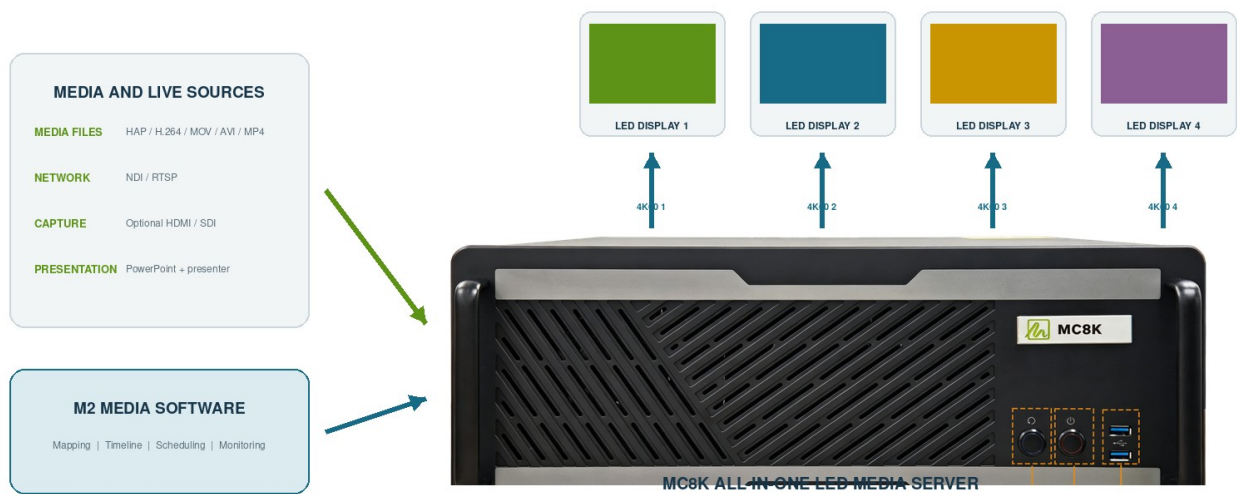
- Supports saving multiple slicing/mapping projects and switching between them through the control system.
- Supports converting standard video to a CAVE perspective effect.
- Supports HDR video playback.
- Supports automatic software launch at startup and unattended scheduled start operation.
- Automatically loads the project at startup and begins playback.
- Supports primary-server and controlled-server modes for integration with third-party control consoles.
- Supports Wake-on-LAN and automatic startup when AC power is applied.
- Supports device-status monitoring, including CPU utilization, memory utilization, and rendering frame rate.
- Supports locking the software interface to prevent accidental operation.

### SECTION 04

## APPLICATION SCENARIOS

### MULTI-DISPLAY MEDIA PLAYBACK AND CONTROL

One MC8K can map four independent 4K outputs to LED displays with different resolutions.



SECTION 05

# PRODUCT APPEARANCE

## FRONT PANEL

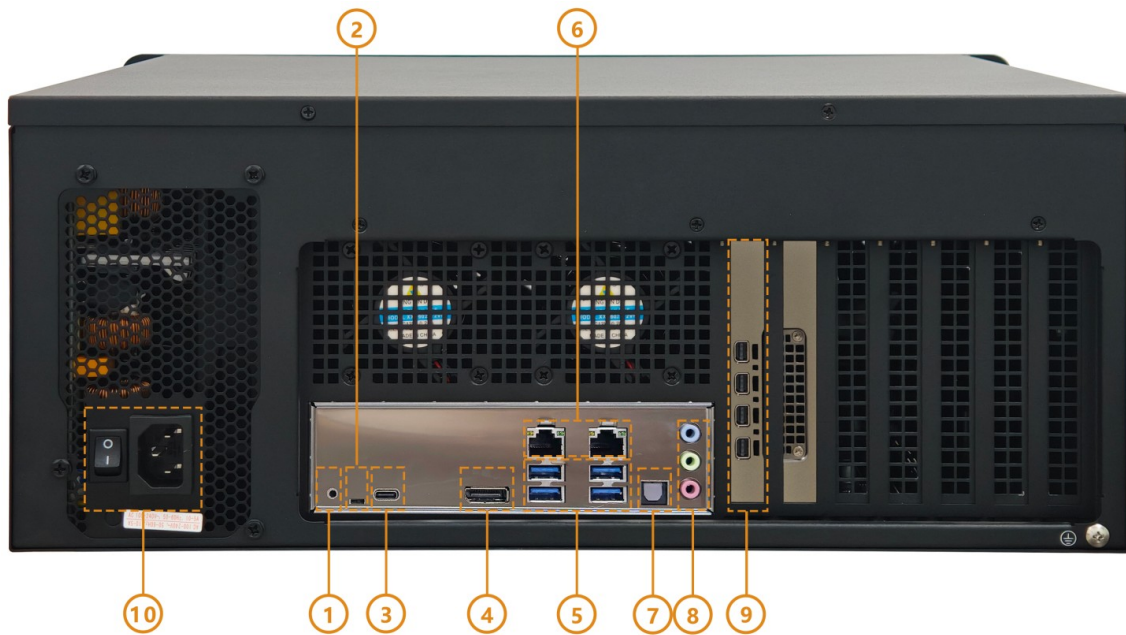


\* Product image for reference only. The delivered product shall prevail.

### 5.1 DATA INTERFACE DESCRIPTION

| NO. | NAME         | DESCRIPTION                 |
|-----|--------------|-----------------------------|
| 1   | Power reset  | Restarts the server.        |
| 2   | Power switch | Turns the server on or off. |
| 3   | USB          | 2 × USB 3.0 ports.          |

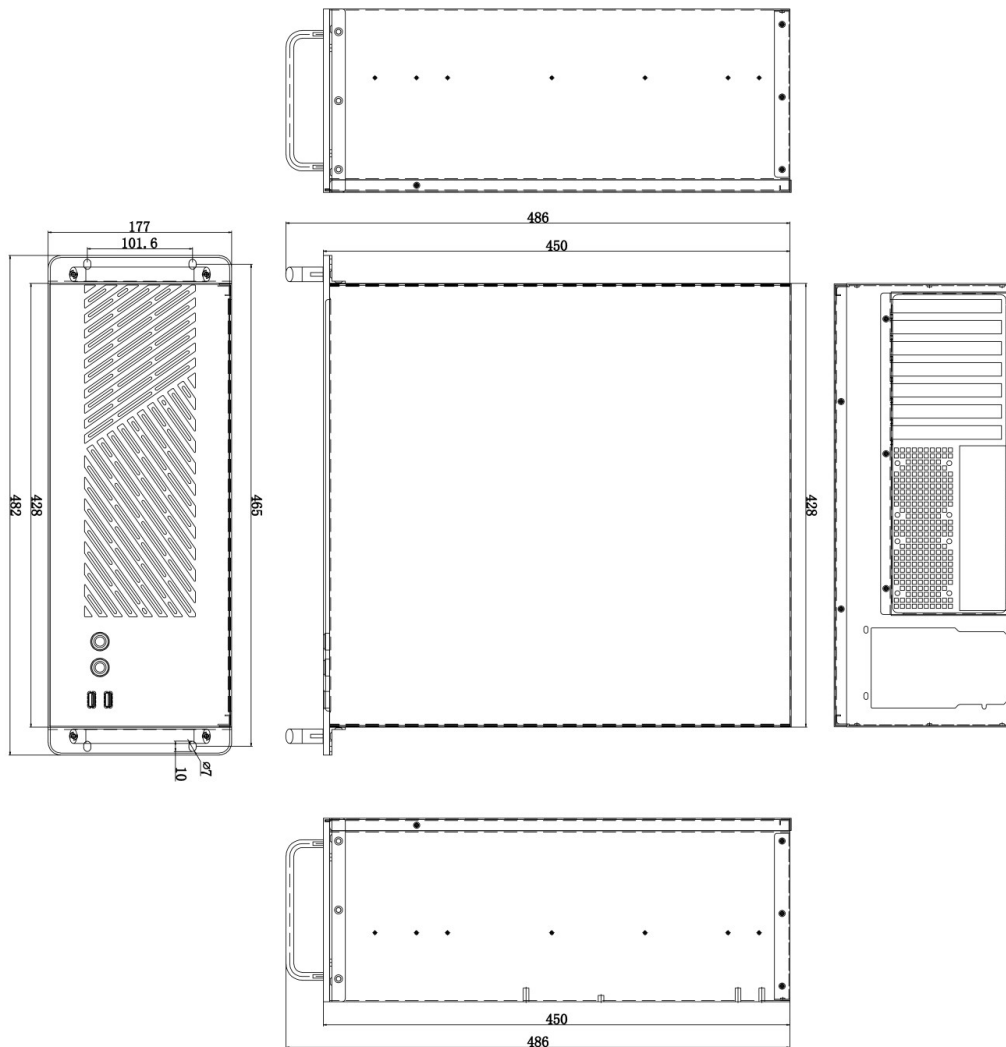
## REAR PANEL



\* Product image for reference only. The delivered product shall prevail.

| NO. | NAME                       | DESCRIPTION                                                      |
|-----|----------------------------|------------------------------------------------------------------|
| 1   | BIOS reset                 | One-touch BIOS reset.                                            |
| 2   | Power-on auto-start toggle | Left: disabled; right: enabled.                                  |
| 3   | USB Type-C                 | 1 × USB Type-C port.                                             |
| 4   | DisplayPort                | 1 × DisplayPort 1.2 output; supports 3840 × 2160 @ 60 Hz.        |
| 5   | USB                        | 4 × USB 3.0 ports.                                               |
| 6   | LAN                        | 2 × LAN ports; supports Wake-on-LAN.                             |
| 7   | Digital audio              | Optical S/PDIF interface; supports 5.1-channel digital audio.    |
| 8   | Analog audio               | Line input (blue), line output (green), microphone input (pink). |
| 9   | Mini DisplayPort           | 4 × Mini DisplayPort 1.4 outputs.                                |
| 10  | AC input                   | AC 100-240 V power input.                                        |

## 5.2 PRODUCT DIMENSIONS



Tolerance:  $\pm 0.3$  mm | Units: mm



## SECTION 06

# PRODUCT PARAMETERS

## 6.1 BASIC PARAMETERS

| PARAMETER               | SPECIFICATION                          |
|-------------------------|----------------------------------------|
| Product name            | All-in-One LED Media Server            |
| Product model           | MC8K                                   |
| Hardware outputs        | 4 × Mini DisplayPort 1.4               |
| Graphics                | NVIDIA professional graphics card      |
| Capture card (optional) | HDMI / SDI interfaces                  |
| CPU                     | Intel processor, 20 cores / 28 threads |
| Memory                  | 16 GB DDR5                             |
| Storage                 | 1 TB M.2 high-speed solid-state drive  |
| Power supply            | 650 W                                  |
| Chassis                 | 4U industrial server chassis           |
| Media software          | M2 media playback and control software |

## 6.2 SPECIFICATIONS

| CATEGORY              | PARAMETER               | SPECIFICATION                                                                                                                |
|-----------------------|-------------------------|------------------------------------------------------------------------------------------------------------------------------|
| Electrical            | Input voltage           | AC 100-240 V, 50/60 Hz                                                                                                       |
| Electrical            | Rated power             | 650 W                                                                                                                        |
| Operating environment | Temperature             | 0°C to +40°C                                                                                                                 |
| Operating environment | Humidity                | 0% RH to 80% RH, non-condensing                                                                                              |
| Storage environment   | Temperature             | -10°C to +60°C                                                                                                               |
| Storage environment   | Humidity                | 0% RH to 95% RH, non-condensing                                                                                              |
| Chassis               | Dimensions              | 482 (W) × 486 (D) × 177 (H) mm                                                                                               |
| Weight                | Net weight              | 11.65 kg                                                                                                                     |
| Weight                | Gross weight            | 15.3 kg, including accessories and packing materials                                                                         |
| Packaging             | Outer carton dimensions | 615 × 565 × 275 mm                                                                                                           |
| Packaging             | Accessories             | 1 × power cord, 4 × Mini DisplayPort-to-DisplayPort cables, 1 × media-software license dongle, 1 × certificate of conformity |

\* Current draw and power consumption may vary with operating conditions, environment, settings, and other factors.

## SECTION 07

# PRECAUTIONS

- High-voltage hazard: the operating voltage of this product is AC 100-240 V.
- Do not allow liquids, metal fragments, or other conductive objects to enter the enclosure; doing so may cause a safety incident.
- Use the equipment in a dry, clean environment.

After-Sales Service Hotline

**400-881-3531**

[www.mooncell.com.cn](http://www.mooncell.com.cn)

