

MP2

Commercial Led Display Controller Series

Specification V4.0



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1 Update Records

Document Version	Hardware Version	Release Time	Update Record
V4.0	MP2 (V1.1)	July 30(th), 2025	First release

2 Product Introduction

MP2 Media Player features high performance 4 Core CPU + GPU Chip Set and it's a combination of the Player with the Sending Card(Integration). Given that the Player has a very high performance of the video processing.

It could be widely used at business display area(fields) such as : Fixed Installation LED Display, Intelligent Lamppost Led Display, Over-door Led Display,Vehicle-Mounted Led Display, Chain Stores Cluster Display Management, Led Electronic Whiteboard, Led Mirror(Mirror-like Led Display),Advertise Led Display, and the Led Display that does not need to be used with the PC(Offline Mode).

3 Product Characteristics

- 2 Gigabit Ethernet port output, supporting 650,000 pixels per port with maximum width 1920 and maximum height 1080
- Supports Wi-Fi connectivity and can function as a Wi-Fi hotspot (either mode selectable)
- Supports 4G module (optional 4G)
- Supports comprehensive program distribution and display control via mobile/iPad, LAN, and PC
- Supports cluster-based remote program release and display control
- Cluster-based remote monitoring of display panel status
- Supports Ethernet debugging for all Mooncell receiving card series
- Low power consumption, minimal heat generation, stable and reliable performance across wide temperature range
- Compact size for easy installation and maintenance

4 Product Features

4.1 Features

- It supports HD videos, Pictures (Images), TXT, Weather Info, Clock and a variety of programs.
- It supports to have the multiple windows, the size & position of the windows could be set as you wish and the window overlay is supported.
- LAN, WIFI, 4G, etc. are supported.
- Applications for Android and IOS are available.
- PC, Mobile Phones and Pad are supported to be used to control and manage with the programs and its parameters.
- The RS485 Sensor Interface could be supported to monitor the temperature, humidity, lightness and some other environmental situations (parameters).
- The brightness of the led display could be automatically adjusted.
- Using the Network Time Protocol (NTP) to synchronize the Time (To get the accurate Time).
- It supports to have multiple displays to work simultaneously (synchronized).
- It supports Monitor HDMI output so that it could be used as the Monitor output, or it could be also used for LED+LCD combined Networks.
- It supports to use the USB Flash disk to update the programs, plug and play, you can also use the Ethernet to update and manage with the programs.
- It supports to automatically adjust the brightness or set the schedule to have the brightness automatically adjusted.
- It supports to play the programs as in “player list” orders.
- Through the Management System, you can have a cluster of settings for its On/Off at a certain time. (Timer).

4.2 Audio & Video Performance:

Programs Partition	Supports freely adjusting window size and position, supports window overlay.
Video Format	MPG,MOV,MP4,FLV,MKV etc.
Audio Format	MPEG-1 Layer III, AAC,etc.
Image Format	JPG、PNG,etc.
TXT Display	Single-Line TXT,Static TXT,Multi-Line TXT
Image Partition	It supports Video,Image,Scrolling Caption,LOGO,Data and Time; the images could be partitioned as you wish.
OSD Supported	It supports 32bit True Color OSD,it could be displayed at any position, it supports the video ,image and TXT to be played together at the same time, the image or TXT could be superposed on the videos, it supports transparent,semi-transparent,opaque effects.
RTC	Real Time Clock Display and Management

4.3 Terminal Management:

Network Communication	LAN/WiFi/4G Network Access
Programs Update	USB Drive Content Plug-and-Play; Management Terminal Network Transmission
Device Management	PC, Android, iOS, and Other Smart Terminal Devices
Wireless Control	Real-time Brightness Adjustment, Display Switch, System Parameter Configuration, Program Playback Control, Wireless Program Transmission
Brightness Automatically Adjustment	Supports automatic screen brightness adjustment based on time or ambient light levels
Timing Playing	Supports playback according to scheduled programs
Management Software	APP Supports various Android and iOS devices

5 Product Appearance

Front Panel



* Product photos are for reference only, please refer to the products actually purchased.

5.1 Data Interface Description

Name	Illustration
DC 5V	Input Power Connector: 5.5*2.5MM
AUDIO	1/8" (3.5mm) TRS Plug Audio Output
LAN	100Mbps Ethernet Network Access
USB	USB 2.0 x 2, for external USB flash drives or other devices
WiFi	WiFi Antenna Connector
4G	4G Antenna Connector (Includes 4G antenna connector when opting for 4G module)
Reset	Restore Factory Settings
Indicator	Illustration
4G	Constant On: 4G module functioning normally Off: 4G module malfunctioning
PWR	Power Indicator: Remains on when powered
WIFI	Constant On: Wi-Fi hotspot functioning normally Off: Wi-Fi hotspot malfunctioning
SYS	Flashing: Operating system running normally Constant On/Off: Operating system malfunctioning

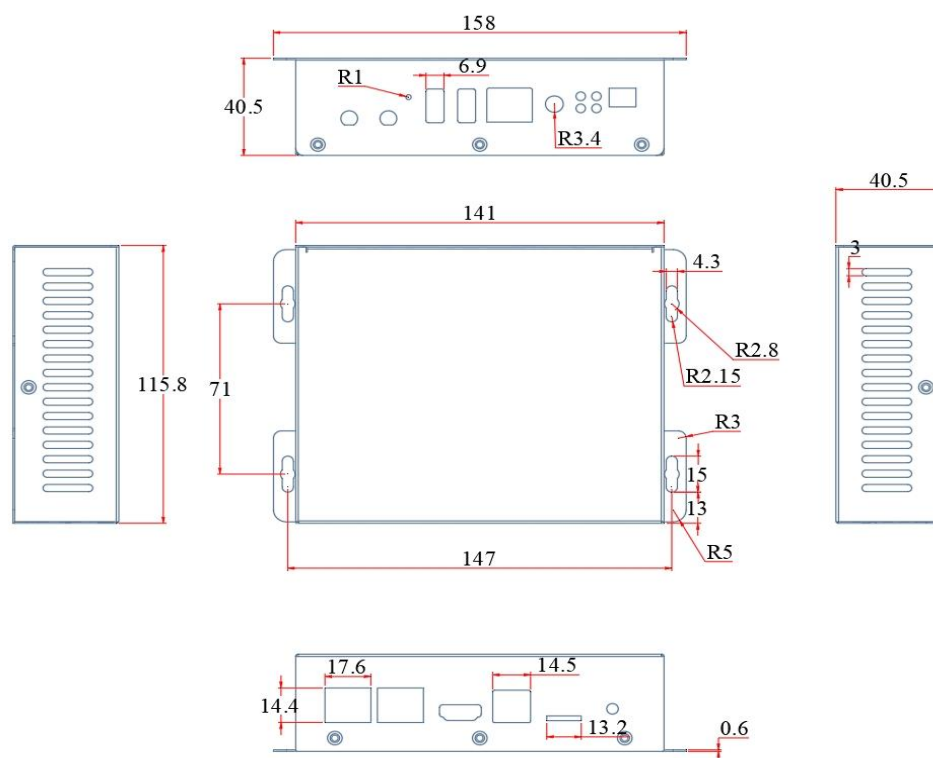
Rear Panel



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Name	Illustration
Port1, Port2	2 Gigabit Ethernet port outputs signal to receiving card
HDMI	HDMI output
SENSOR	Optical sensor probe interface
SIM	Micro SIM card slot for 4G mobile SIM card

5.2 Dimensions(Size: mm)



Tolerance: ± 0.3 Unit: mm

6 Product Parameters

6.1 Performance Parameters

Performance Parameters	Processor: Quad-core CPU + GPU Memory: 1GB DDR3 high-speed RAM Flash Storage: 8GB EMMC high-speed storage Resolution: Supports 1080p HD hardware decoding playback
Network Access Method	100 Megabit, LAN、WiFi AP、4G Module (Optional)
Processing Capacity	Supports 1.3 Million pixels Maximum width: 1920 pixels, maximum height: 1080 pixels
Supported Receiving Cards	Mooncell Receiving Cards

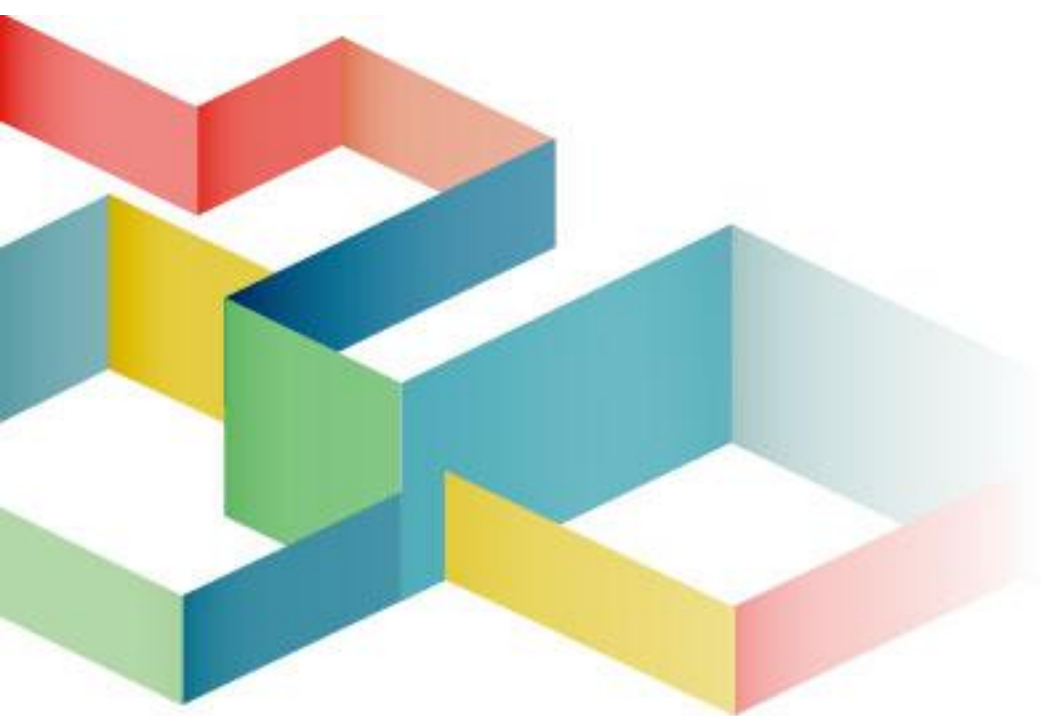
6.2 Specification

Electrical Parameters	Rated Voltage	5V
	Rated Power	8W
Operating Environment	Operating Temperature	-20°C~60°C
	Operating Humidity	0%RH~80%RH, No condensation
Storage Environment	Storage Temperature	-40°C~80°C
Dimensions	158mm×115.8mm×40.5mm	
Net Weight	0.38Kg	
Packing Information	List	1× Ethernet cable, 1× Wi-Fi antenna, 1× 5V power adapter (5.5mm × 2.5mm standard connector), 1× USB cable, 1× Certificate of Conformity
	Option List	4G Module (includes 4G module, antenna, and antenna mount)
	Dimension	305mmX245mmX85mm
	Packaging	Single unit, outer packaging varies in size depending on quantity.
	Gross Weight	0.68Kg

* Current and power consumption may vary according to different factors such as product usage, environment and settings.

7 Precautions

- The installation process must be completed by professionals.
- Must be antistatic.
- Please pay attention to waterproof and dust removal.



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