# iM9

## Multifunction Card

## Specification V2.1

Colorlight Cloud Tech Ltd
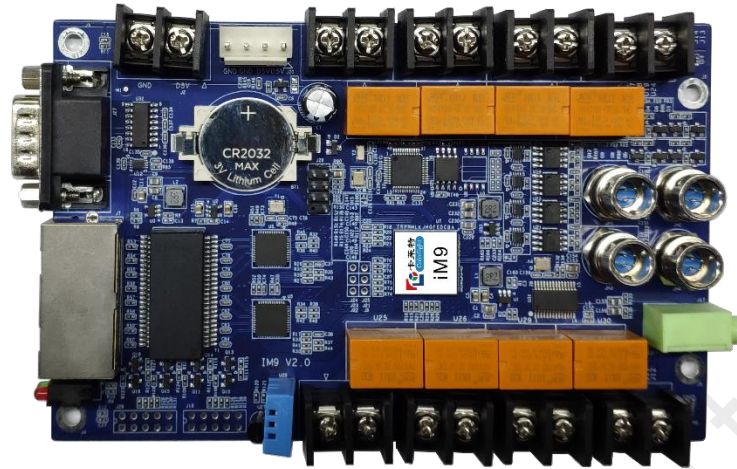
# Overview



iM9 multifunction card is an important accessories of the Colorlight control system for environmental monitoring and remote control.

iM9 can be used to monitor the operating environment of the LED displays, such as temperature, humidity and smoke to ensure the safety of the display.

iM9 can detect the environmental brightness and adjust the brightness of the display automatically in order to make sure the display work in the most suitable brightness.
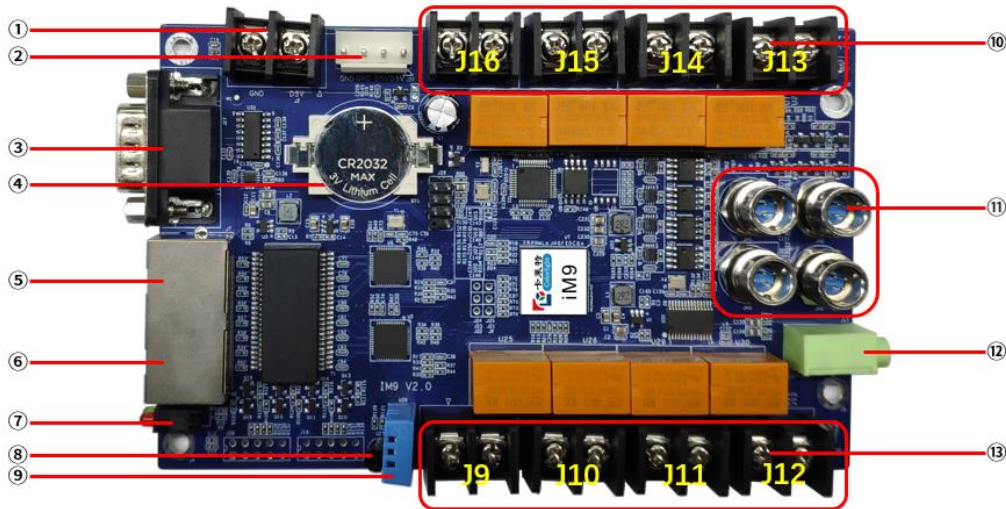
iM9 contains 8 relays switches that can be used to control the power supply remotely. Benefit from iM9, you can turn on or off the power supply of the equipments such as display, air conditioning, fans, and power distribution cabinets by the software on the computer, instead of going to the front of the equipment.

# Specifications

## System compatibility

| | |
|---|---|
| Sending device | All Series of Colorlight sending devices |
| Receiving device | All Series of Colorlight receiver cards |
| Transmission equipment | Support Gigabit switch, fiber converter |

## Physical/Electrical

| | |
|---|---|
| Dimensions | Length：149.9mm,Width:96.5mm |
| Input voltage | DC 3.8~5.5V |
| Rated power consumption | 4W |
| Storage and transportation temperature | -40℃~125℃ |
| Operating temperature | -25℃~70℃ |
| Weight | 180g |

## Remote control

| | |
|---|---|
| Remote power management | 4 switches for LED display<br>4 switches for the air conditioning , fans or other switch control(can be automatically controlled by the temperature sensor) |
| Brightness adjustment | Automatically adjust brightness of the LED display screen according to the environment |

## Environment monitoring

| | |
|---|---|
| Temperature | Support |
| Humidity | Support |
| Smoke | Support (Optional) |

## Other functions

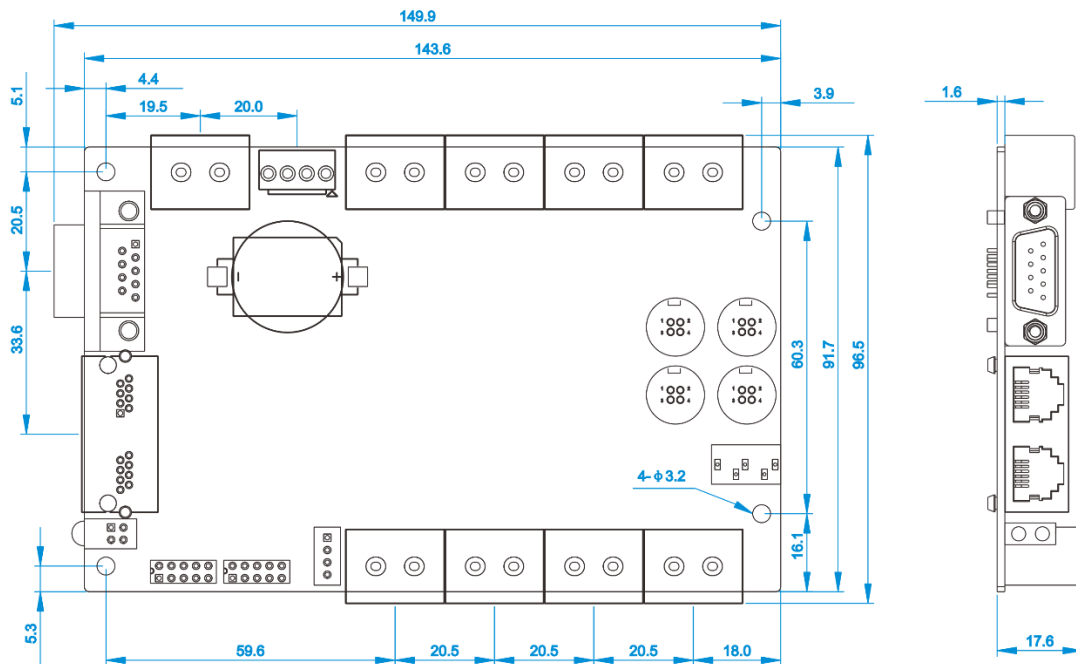| | |
|---|---|
| Audio transmission | Support ( Used in conjunction with the sending device) |
| Automatic power off | The display will automatically turn off when the signal of the sender is cut off, and it will automatically turn on when the signal is restored. |

# Hardware



## 1、Interface descriptions

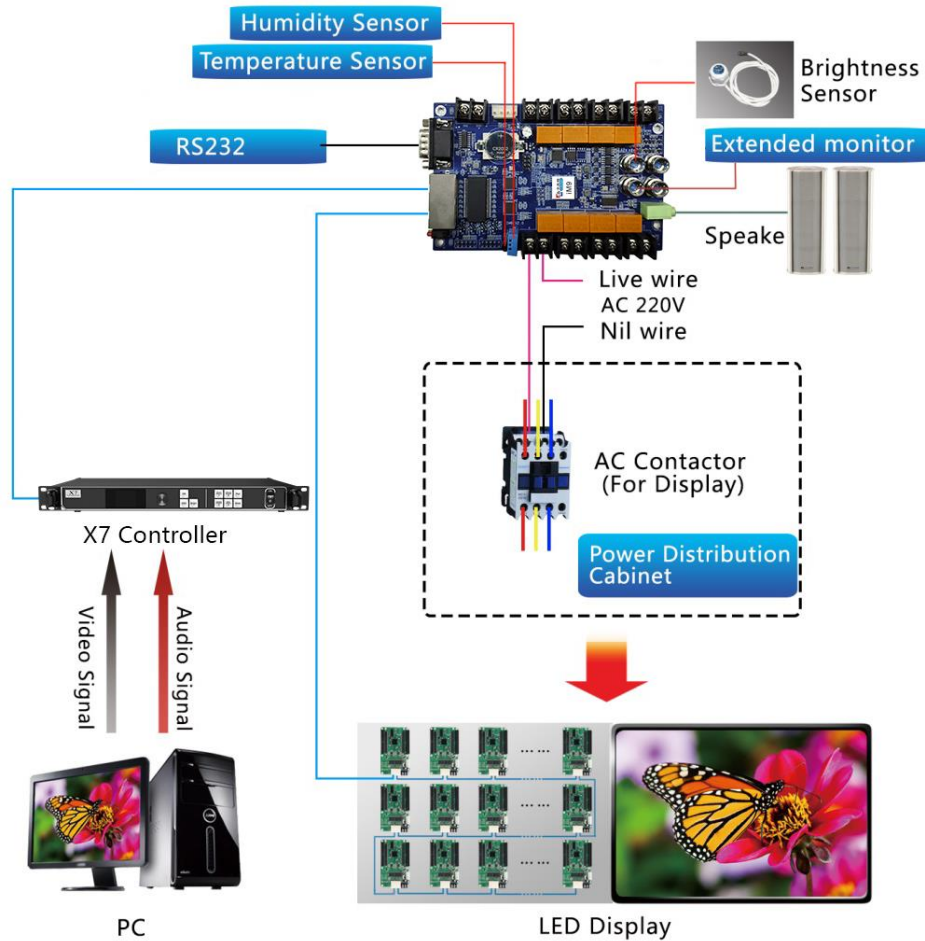| S/N | Name | Function | Remarks |
|-----|------|----------|---------|
| 1 | Power 1 | Connect to power supply | Only one is used. |
| 2 | Power 2 | Connect to power supply | |
| 3 | RS232 | For equipment control | |
| 4 | Battery holder | Apply CR2032 button batteries | |
| 5 | Ethernet port A | Connect to the controller or receiver card | The Ethernet port A and B can achieve import/export at random, which can be identified in an intelligent way |
| 6 | Ethernet port B | Connect to the controller or receiver card | |
| 7 | Indicator | Indicate power and signal working status | Red indicator for power supply, and green for data signal |
| 8 | Temperature sensor | Monitor ambient temperature | |
| 9 | Humidity sensor | Monitor environmental humidity | |
| 10 | Switches for power control J13-J16 | Used for remote power control, power-on or off delay. J13-J15 can be individually controlled by different sensors like temperature sensor. | (Attention the maximum current limit: 3A ) |

| 11 | Extended monitoring interface | Used to monitor the brightness, humidity and smoke | Customized |
|---|---|---|---|
| 12 | Audio output | Analyze and output the audio signal from the controller. | |
| 13 | Switches for power control J9-J12 | Used for remote power control, power-on or off delay. J9-J12 can be turned on or off successively at regular intervals. | (Attention the maximum current limit: 3A ) |

## 2、 Dimensions

Unit: mm

# 3、Connection Diagram



# Statement

Thank you for purchasing the product of Colorlight Cloud Tech Ltd. If you encounter any problems during use or have any suggestions, please contact us through official channels. We will do our best to provide support and listen to your valuable suggestions. We will constantly make improvements on technical specifications but without notice. You can visit www.colorlightinside.com to get more updated information.