

iM9

Multi-function Box

Specification



Overview

iM9 multi-function box is an important accessory of the control system for environmental monitoring and remote control.

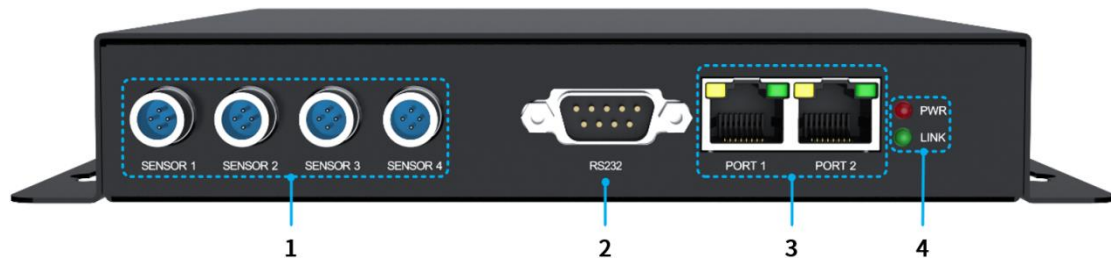
- Monitor the operating environment, such as temperature, humidity, and smoke, ensuring the safety use of the LED display.
- Measure the environment light to auto-adjust the display brightness, allowing for the best visual effect while energy saving.
- With multiple relay switches, it can remotely control the power switch of field equipment, such as air conditioner, fan, and power distribution cabinet.

Features

System Compatibility	
Sending device	Support sending devices
Receiving device	Support receiving cards
Transmission equipment	Support Gigabit switch, fiber transceiver
Remote Control	
Remote power switch control	4 relay switches for LED display 4 relay switches for air conditioner and fans,etc. (auto-controlled by temperature sensor)
Brightness adjustment	Auto-adjust brightness of the LED display according to the environment (Need the support of controller.)
Environment monitoring	
Temperature	Support
Humidity	Support
Smoke	Support(Optional)
Others	
Audio transmission	Support (Use with sending device)
Automatic power off with no signal	The display will power off when the sender signal is cut off, and power on after the signal is restored. The whole process is automatic

Hardware

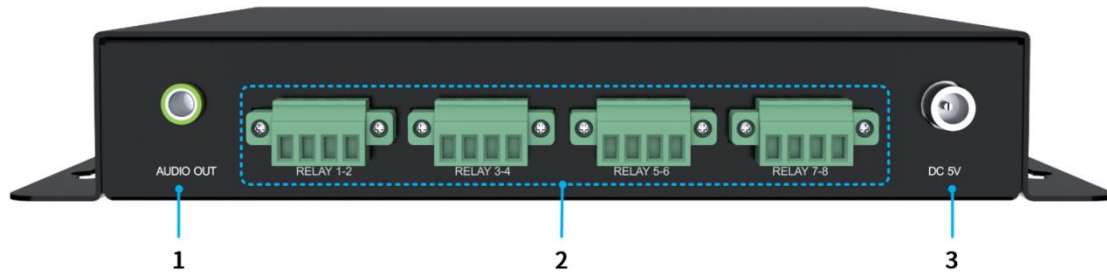
Front panel



No.	Name	Function
1	SENSOR1~4	External sensor to monitor temperature/humidity/smoke/brightness in real-time. ¹
2	RS232	Serial port for receiving commands of relay control and automatic brightness adjustment.
3	PORT1~2	2xRJ45 Gigabit Ethernet ports. <ul style="list-style-type: none"> - Connected to a sender or a receiving card. - Both ports support input and output.
4	Indicators	PWR: Power indicator. <ul style="list-style-type: none"> - Steady red: Normal power supply. LINK: Signal transmission status indicator. <ul style="list-style-type: none"> - Blinking green: Normal signal input.

¹ Sensor is optional. Please consult our technicians when using it.

Rear panel



No.	Name	Function
1	AUDIO	Output the audio signal from the sending device.
2	RELAY 1-8 ²	Relay switch control for the auto time delay. - RELAY 1-4 are switches that delay the power on and off. - RELAY 5-8 are controlled switches for temperature and smoke.
3	DC 5V	DC 5V input.

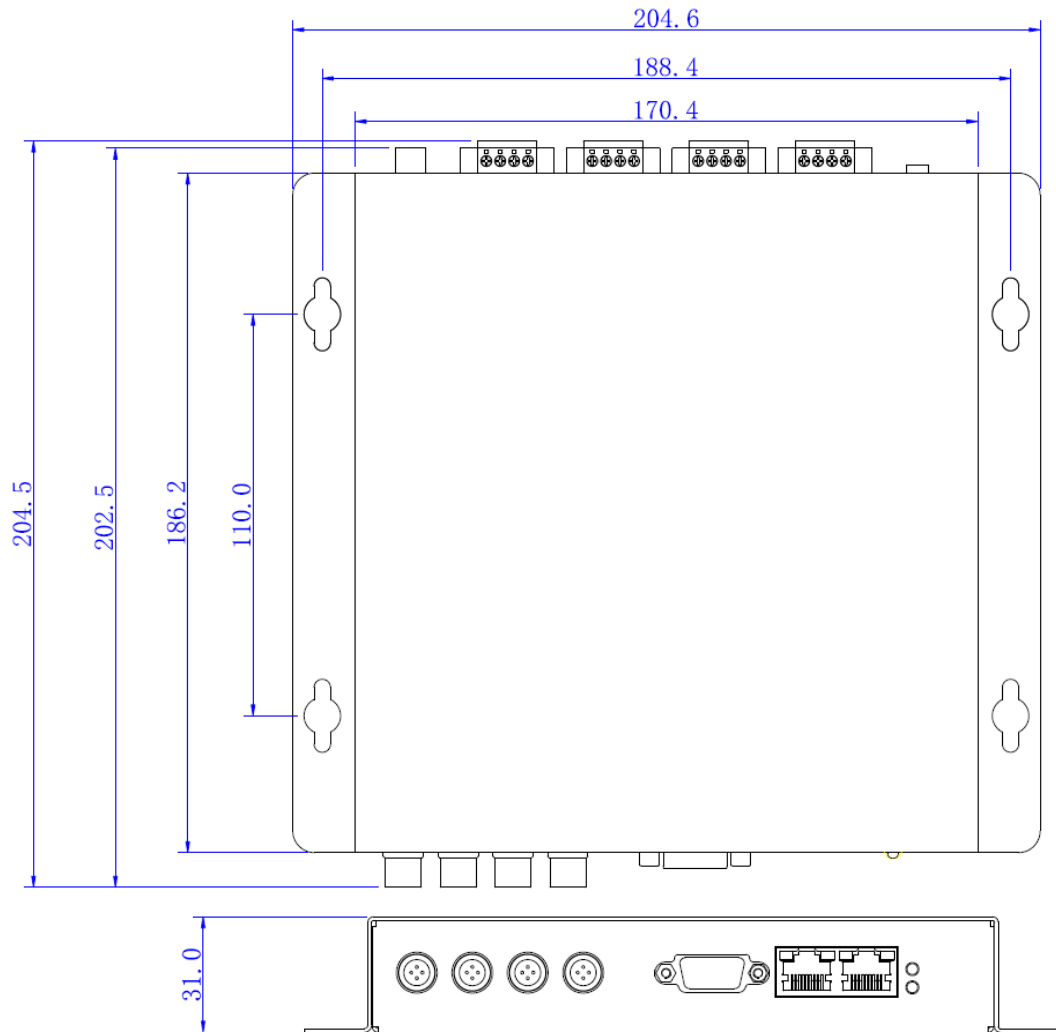
Specifications

Dimensions (W×H×D)	
Device	204.6mm (8.1")×31.0mm (1.2")×204.5mm (8.1")
Packing	325.0mm (12.8")×72.0mm (2.80")×245.0mm (9.6")
Weight	
Net weight	1.01kg / 2.23lbs
Electrical parameters	
Power supply	DC 5V, 1.2A
Rated power	6W
Operating environment	
Temperature	-25°C~70°C / -13°F~158°F
Humidity	0%RH-80%RH, non-condensing
Storage environment	
Temperature	-40°C~125°C / -40°F~257°F
Humidity	0%RH-90%RH, non-condensing

² Current limit: 3A. Voltage limit: DC 30V, AC 42V.

Reference dimensions

Unit: mm

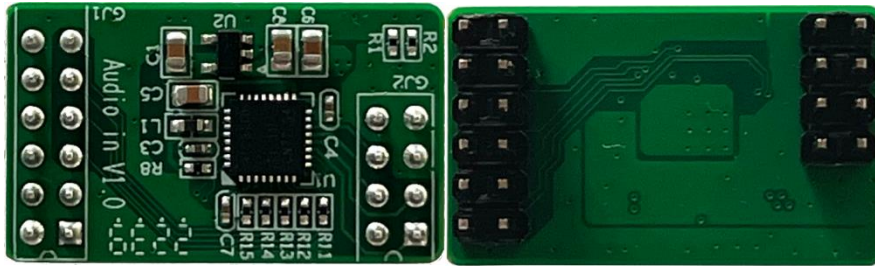


Audio mini-card

Features

- Use with iM9 and S2 sending card.³
- Audio transmission and playback.

Appearance



Pin definition

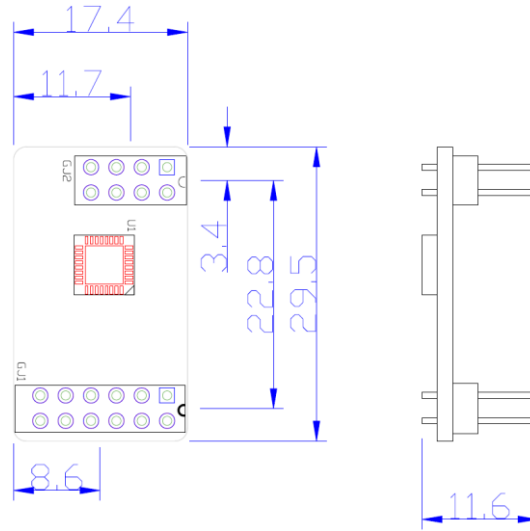


GJ1					
Instruction	Definition	No.	Definition	Instruction	
VCC (3.3V)	D3V3	1	2	GND	Grounding
Empty	NC	3	4	DOUT	Data Output
Master Clock	MCLK	5	6	GPIO	Reserved Pin
Bit Clock	BCLK	7	8	RESET	Reset
Word Clock	WCLK	9	10	SCL	I2C Clock
Data Input	DIN	11	12	SDA	I2C Data
GJ2					
Instruction	Definition	No.	Definition	Instruction	
Detection Signal	MICDET	1	2	NC	Empty
Bias Voltage	MICBIAS	3	4	MIC_LP	Left channel
Analog ground	AGND	5	6	MIC_RP	Right channel
Analog ground	AGND	7	8	NC	Empty

³ Optional. Please consult our technicians when using it.

Reference dimensions

Unit: mm



Application

