



MAIR-Q/H.10  
AirKit Air Quality Sensor  
Datasheet



Version : V1.0.2

## Product Description

MAIR-Q/H.10 AirKit air quality sensor is a smart air comprehensive index monitor that can monitor PM2.5, temperature, humidity, carbon dioxide (CO<sub>2</sub>), TVOC and other parameters in the air, and basically covers various indicators reflecting air quality. It supports remote data viewing and intelligent management via the HDL ON mobile app. The product adopts RS-485 communication interface and integrates ModBus RTU protocol, which is convenient for users to quickly integrate into existing systems.



# Technical Parameters

Basic Parameters	
AC Power	180-240V
DC Power	7-32V
Current	≤250mA
Interface	RS-485
Installation	Standard 86 Type Box
Dimension	134×134×35 (mm)
TVOC Sensor	
Measuring Range	0.22-9.99mg/m³
Resolution	0.01mg/m³

PM2.5	
Measuring Method	Laser Scattering
Measuring Range	0~999µg/m³
Measuring Accuracy	±15%
Response Time	≤5s
CO <sub>2</sub> Sensor	
Measuring Method	Infrared
Measuring Range	400-5000ppm
Measuring Accuracy	±40ppm±3% Read
Resolution	1ppm
Temperature Sensor	
Measuring Range	- 40℃~125℃
Measuring Accuracy	±0.3℃
Humidity Sensor	
Measuring Range	0-100%RH
Measuring Accuracy	±3%RH

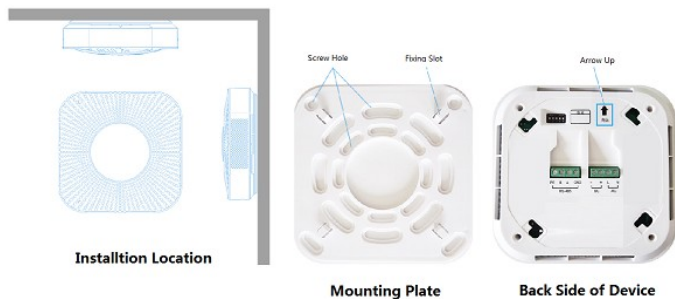
## Installation Location

This product is mainly point-mounted, and only needs to be installed on the roof or wall of the detection area. Since the flow of air is constant, the parameters across the regions are relatively similar. If for specific or rigorous requirements, this can be installed separately in each area.

## Installation Method

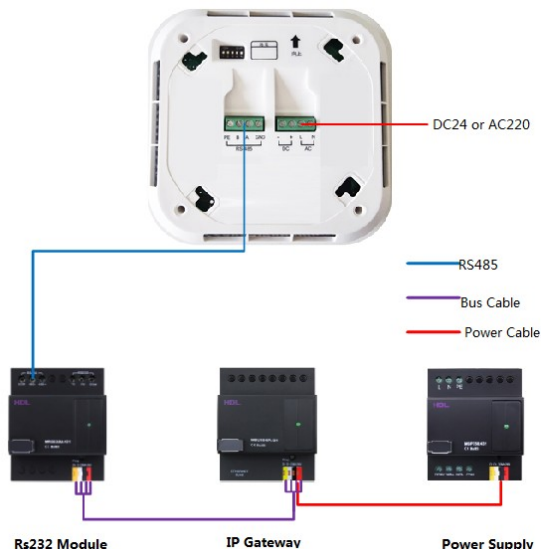
This product can be mounted on a standard 86 Type back box, American standard back box or directly attached to the roof or wall by using screws. The installation steps are as follows:

1. Fix the mounting plate to the wall and secure the card outward.
2. After connecting the device to the cable, fix it on the mounting plate and turn it clockwise to lock it.



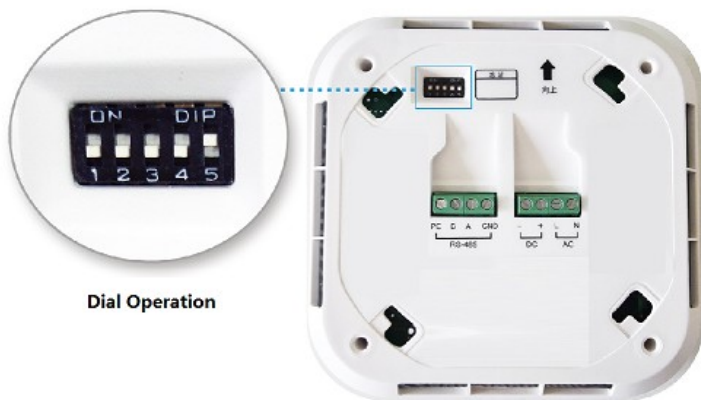
## Wiring

1. This product is connected to the HDL RS232 module (model: HDL-MRS232U.431, hardware version: T) through Modbus485, Please be sure to use it together.
2. Support two ways power: DC (recommended) and AC. Please make sure the power supply is wired correctly.
3. Please follow the interface instructions on the back of the device for wiring.



## Dial Operation

An AirKit air quality sensor can only be used in conjunction with an RS232 module. it needs to be dialed as shown in following figure:  
Position 5 to the top and the rest to the bottom.



## Indicator Description

This product is equipped with a circular indicator light in the middle of the front. The correspondence between the status of the device and the status of the indicator is as follows:

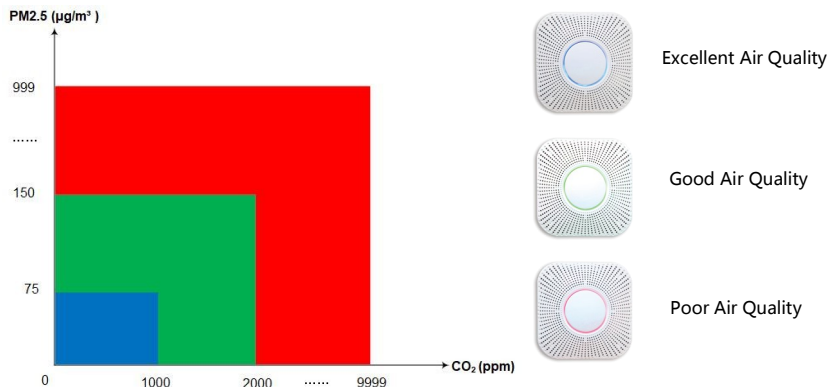
Configuration status: flashing at 1 second in blue

Detecting air quality: rotating

Sleep status: breathing light

Note: When the device is in sleep status, press the center button to trigger it, and turn off the indicator by pressing the button again.

The color of the indicator light changes with the change of air quality. The corresponding relationship between the two is as follows:





© 2019 HDL Automation Co.,Ltd All rights reserved.

This manual may be changed or updated without prior notice.