# **Wireless IAQ Monitoring Module (V1.0)**

## Wireless IAQ Monitoring Module



#### Temperature + CO2 + Humidity+ VOC + PM2.5

#### New Smart Controller

- The cable has 4 pins so that communication can be smoother and longer.
- Display the IAQ data detected by IAQ module to control humidity, CO2, VOC, PM2.5.



# The function of the IAQ Module

The IAQ Module should communicate with the intelligent control panel of energy recovery ventilators or other ventilation systems, sensing indoor air quality and transmitting data to the control system, which will subsequently control the ERV to maintain good indoor air quality.



Features:

- 1. Free installation, no wiring, no code matching.
- 2. Sensing the air quality of the user's living space.
- 3. An ERV monitors the air quality in multiple spaces.
- 4. Zigbee networking, long transmission distance, more stable data.
- 5. Micro USB 5V DC power supply, mobile phone charger can supply power.
- 6. Linked with APP to achieve more intelligent control.

# **Connection method**

- 1. Power supply: 5V DC
- 2. Power port: Micro USB
- 3. The ERV is turned on, and the connected control panel is working well (refer to the right picture)
- 4. The ERV controller and the IAQ module connects automatically(2-5 minutes). When the connection is successful, the air quality data on the control panel will be shown (as shown below)

(Temperature, humidity, carbon dioxide concentration, VOC level and PM2.5 concentration)

5. Once the IAQ module is connected, the control panel displays and the ERV unit operation logic are based on the IAQ module data (IAQ module has priority over the control panel)



### Accesse to view the IAQ data

When ERV is running, long-press the MODE button for 5 seconds to access the IAQ module viewing interface(hearing a "Bee"), as shown below, pressing SET to change from parameters, and pressing UP and DOWN for data of each IAQ module.



# **Connection of multiple IAQ modules**

- Free installation, no wiring, no code matching, monitor the indoor air quality in real-time
- 2 An ERV maximum connected with 15 IAQ sensors
- **?** Zigbee networking, long transmission distance.
- 4 Work with App to achieve more intelligent control



#### How to connect the multiple IAQ modules

- a) Remote controller VS 15 (max)IAQ module, for multi-zone air monitoring and unit linkage.
- b) Control panel can be connected with 15 IAQ module. The IAQ module is identified by a serial number on the PCB board's Dial Switch.
- c) No. 1 is the factory default number. Remove the module shell as illustrated below if you want to connect several IAQ modules. To proceed with the settings, dial the code. (When dialing the code, the IAQ module must be turned off!)

	No.01	No.06	No.11	
	No.02	No.07	No.12	
	No.03	No.08	No.13	
	No.04	No.09	No.14	
	No.05	No.10	No.15	

# ZigBee networking communication between multiple IAQ modules

Multiple IAQ modules communicate with control panel through ZigBee 2.4G Hz network.

A single IAQ module's transmission distance is less than 100 meters; however, if something gets in the way, such as walls, it will cause poor communication.

An IAQ module that is close to the control panel can send out a relay signal to link to another IAQ module that is far away.



# View IAQ module data through APP









# How to check the data for multiple wireless IAQ modules

After the IAQ module is connected, the system will monitor the CO2 concentration and humidity fed back by the IAQ module in default number 1. But when connecting to multiple IAQ modules, if you want to alter the default IAQ module to others, please follow up the below steps to change the IAQ default number.



# How to check the data for multiple wireless IAQ modules



Step 1. Long press the MODE button for 5 seconds when the ERV is turned off and the control panel is turned on, till you hear a "Bee" entering the parameter setting interface.



Step 2. Press the SET button to choose parameter 27( the number for altering the default IAQ number).



Step 3. In parameter 27, press MODE Button, the IAQ number flashes indicating the adjustment statues, then press the DOWN and UP buttons to select the IAQ module number you want to monitor, and then press the SET button to save the record.



# How to set the CO2 or humidity threshold to control the ERV

After the IAQ module is connected, the system will monitor the CO2 concentration and humidity fed back by the IAQ module, customers can adjust the data range as needed.

- Long press the MODE button for 5 seconds when the ERV is turned off and the control panel is turned on, till you hear a "Bee" entering the parameter setting interface.
- Press SET button to chose parameters 07( the number for adjusting the CO2 concentration range), as shown below, number 0 indicating the CO2 function is switched off, press the MODE button, number 0 flashes, pressing DOWN and UP button to adjust from 80 - 250 (refers to CO2 concentration(800ppm-2500ppm), press SET button to save the record.



# How to set the CO2 or humidity threshold to control the ERV

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Humidity range adjustment: when control panel standbys(ERV on or off status are workable), press MODE button, as shown below, press DOWN and UP button to adjust the humidity range, press MODE button to the next parameter settings.

When the system monitor the data fed back by the IAQ module (CO2 or humidity) exceeds the setting range, it drives the ERV to run at highest speed, until the data drops below to the setting range.



### WIFI Module connect to several ERV units

