



ECO<sup>Pair PLUS</sup>

# Single Room Energy Recovery Ventilator



New Control Panel



Wireless Pairing Operation



Multiple Linkage Control



WIFI Function

ECO<sup>leaf</sup> Pair PLUS

# Content

*01 Product Features  
& Structure*

*02 Specification & Accessories*

*03 Product Function*

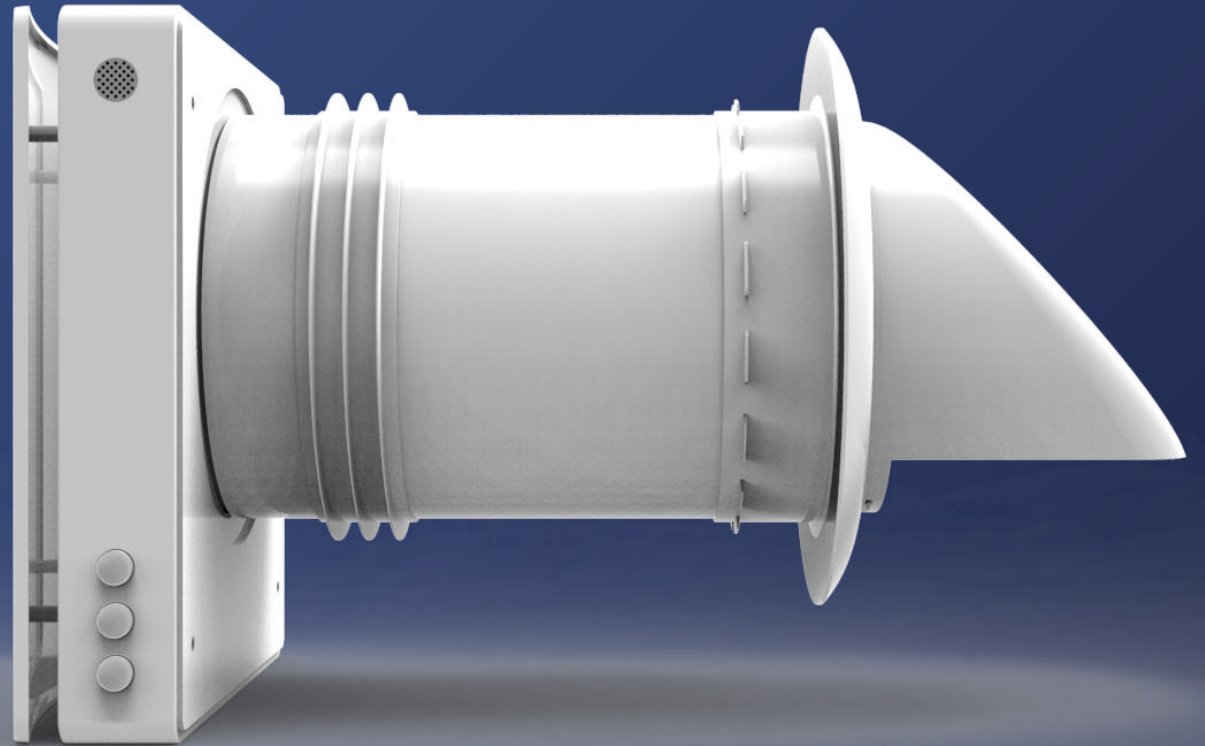
*04 WIFI Control*

ECO Pair PLUS

# Product Overview

 *Product Features*

 *Product Structure*



# ECO Pair PLUS

## Product Features



### SAFE

Auto shutter can prevent the insects entering and the cold air flowing backward when the unit stops. The outer hood can prevent rain draining back and birds nesting.



### FLEXIBLE

Unit can work individually or in pairs.



### EFFICIENT

High heat recovery efficiency of up to 97% is achieved due to the use of a cellular regenerator.



### MOLD PREVENTION

The ceramic energy regenerators cover with anti bacteria and anti-mildew coating.

The efficient ventilation can prevent excessive indoor humidity and mold build-up.



### INDOOR AIR QUALITY MONITORING

Equipped with CO2 sensor as standard, humidity sensor optional for indoor air quality monitoring.

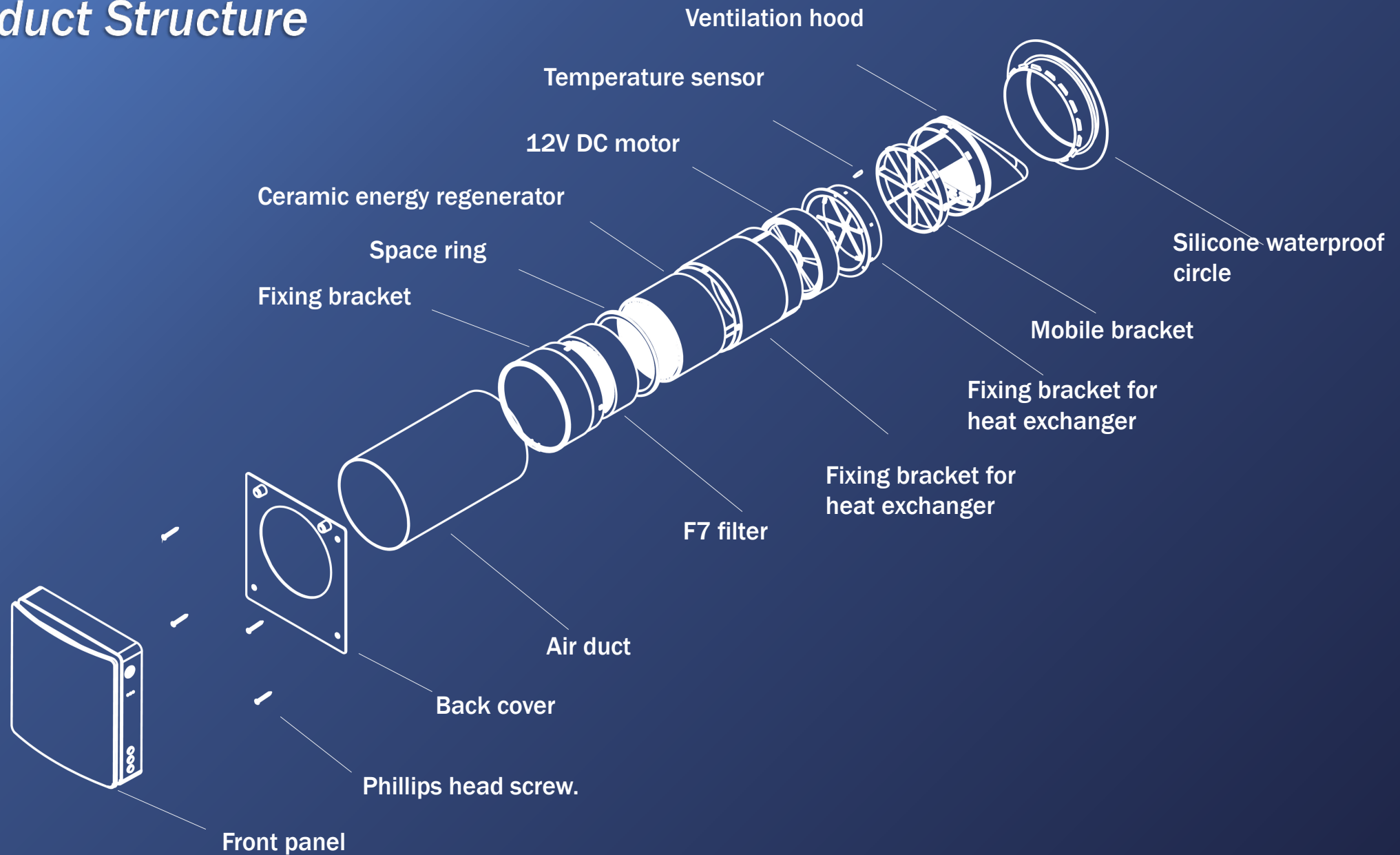


### EASY INSTALLATION

One-stop install through internal wall with a single hole.



# Product Structure





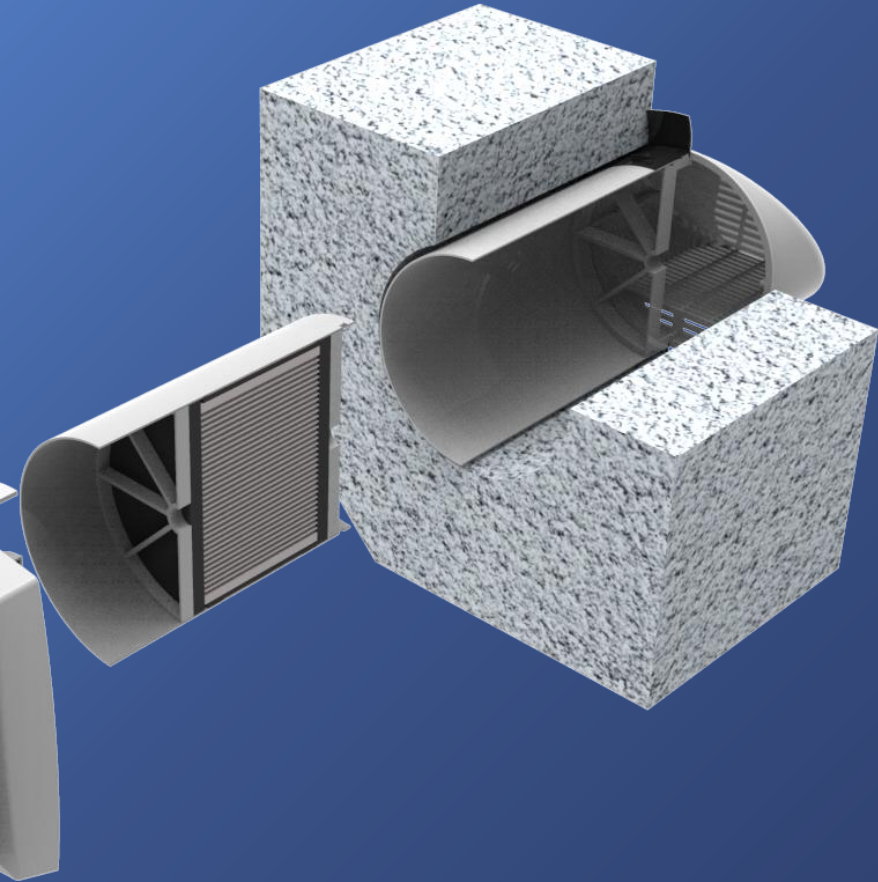
ECO Pair PLUS  
*Specification*



## TECHNICAL DATA

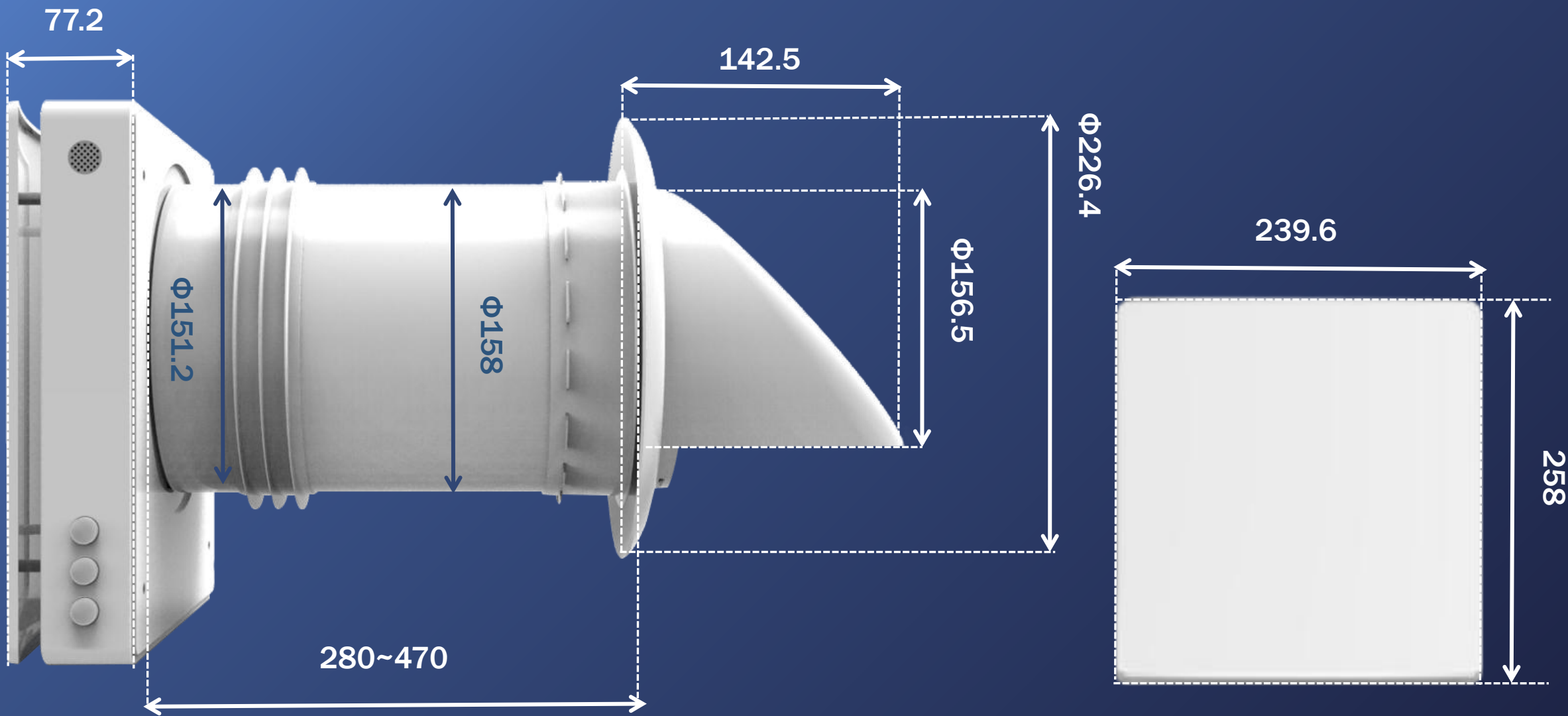
IP22

A



Model No.	<b>AV-TTW5-W</b>		
Voltage	100V~240V AC /50-60Hz		
Power [W]	6	7	7.8
Current [A]	0.04	0.05	0.06
Air flow in supply/exhaust mode [m <sup>3</sup> /h]	20	40	50
Sound pressure level [dBA] 32.7	32.7		
Regeneration Efficiency	Up to 97%		
SEC	Class A		
Transported air temperature [°C]	-20~50		
Ingress Protection Rating	IPX4		
RPM	2200 (max)		
Diameter of duct [mm]	158mm		
Type of installation	Wall mounting		
Net Weight	4.2kg		





ECO Pair PLUS  
*Dimensions*





ECO Pair PLUS

# *Product Function*

-  *Control functions*
-  *Wireless Operation*
-  *Pairing Operation*
-  *Energy Regeneration*

# ECO Pair PLUS

## Control Functions



### 1. CONTROL PANEL

- Using radio signal for communication.
- Longer distances communication up to 15m without barrier.
- Wider control area, multiple devices can be controlled at the same time.
- Accurate control to avoid controlling the wrong device.



ON/OFF



Regeneration mode



Supply mode



Exhaust mode



Fan speed increase



Fan speed decrease



LED light switch

### 2. WIFI CONTROL

- On/off setting
- Fan speed control
- Working mode selection
- LED lights on/off
- CO2 value display and setting
- Optional humidity value display and setting
- 7\*24 hours timer setting
- Error display
- Online/offline display
- Linkage status display
- Smart control according to local weather
- Linkage control with other appliances with Tuya IoT





ECO Pair PLUS

## *Paring Operation*

### WIRELESS OPERATION IN PAIR TO ENSURE BALANCED VENTILATION

One ERV supplies fresh air for 75s, while the other ERV extracts indoor stale air for 75s, to achieve a balanced ventilation system.

Wireless connection of master and slave unit, No Wiring or Dialing Needed

30 meters ultra long distance transmission.

\* 30 meters was tested without barrier and interference. In practical application, it is recommended to install within 8-15 meters.



# ECO Pair PLUS Energy Regeneration



WHEN  
IT'S COOL  
OUTSIDE

ENERGY SAVING

The ventilator operates in the heat recovery mode with two cycles can **save energy by over 30%** compared with the normal exhaust fan. **The heat recovery efficiency is up to 97%** when the air first entering the heat regenerator. It can recover the energy in the room and reduce the load on the heating system in winter.





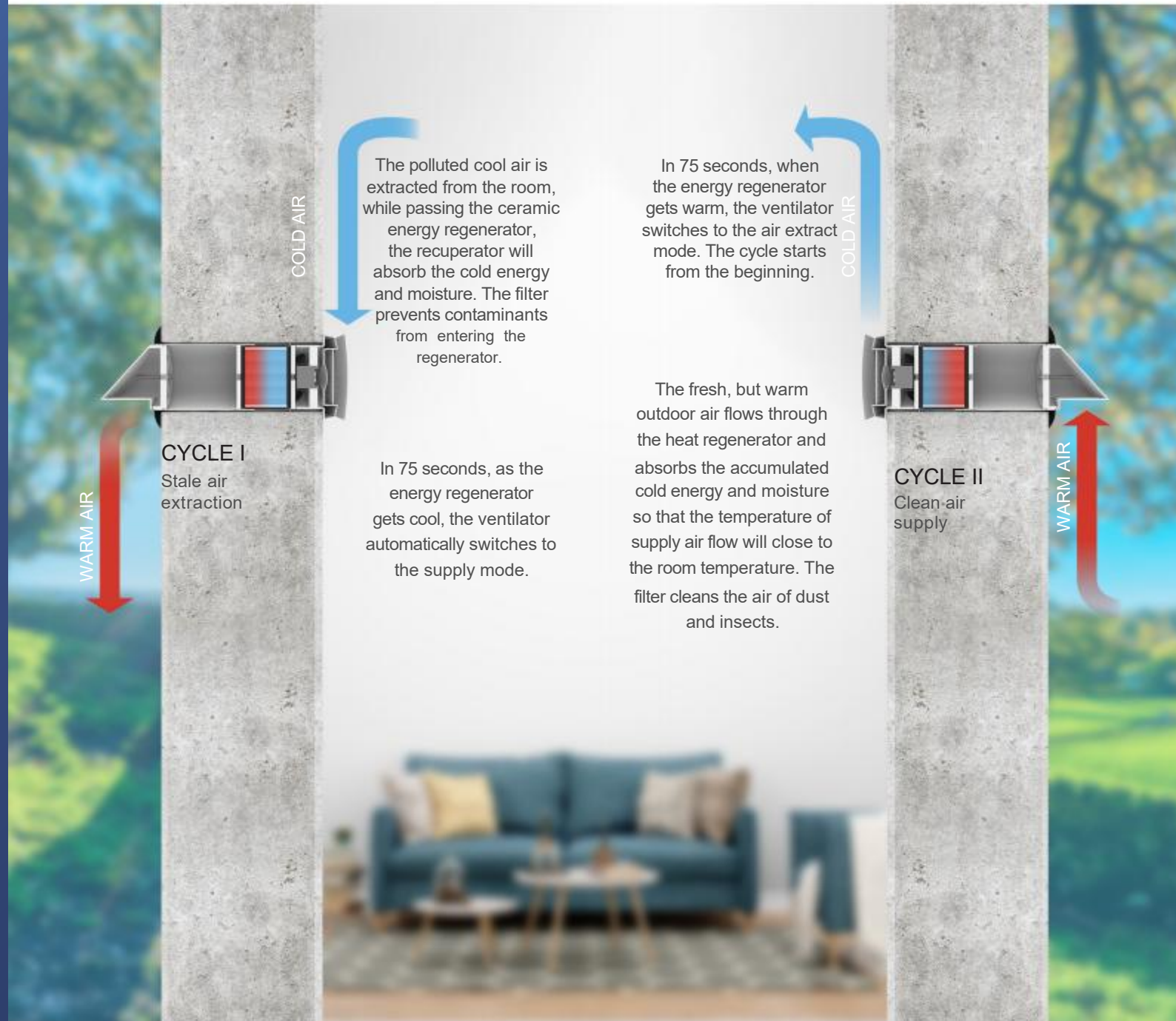
# ECO Pair PLUS Energy Regeneration



WHEN  
IT'S HOT  
OUTSIDE

## ENERGY RECOVERY

The ventilator operates in the heat recovery mode with two cycles. Two units intake/exhaust air alternately at the same time to **achieve balance ventilation**. It will increase the indoor comfort and make ventilation more effective. The heat and humidity in the room can be recovered during ventilating and the load on cooling system can be reduced in summer.



# Operation modes



Regeneration Mode



Supply Mode



Exhaust Mode

Under regeneration model, the ventilators work in pair, one will extract air and the other will supply air. The fans rotate in different direction.

Under supply mode, two ventilators will run simultaneously to supply air to the room.

Under exhaust mode, two ventilators will exhaust air simultaneously.

Mode button: when the ERV is on, selectable from

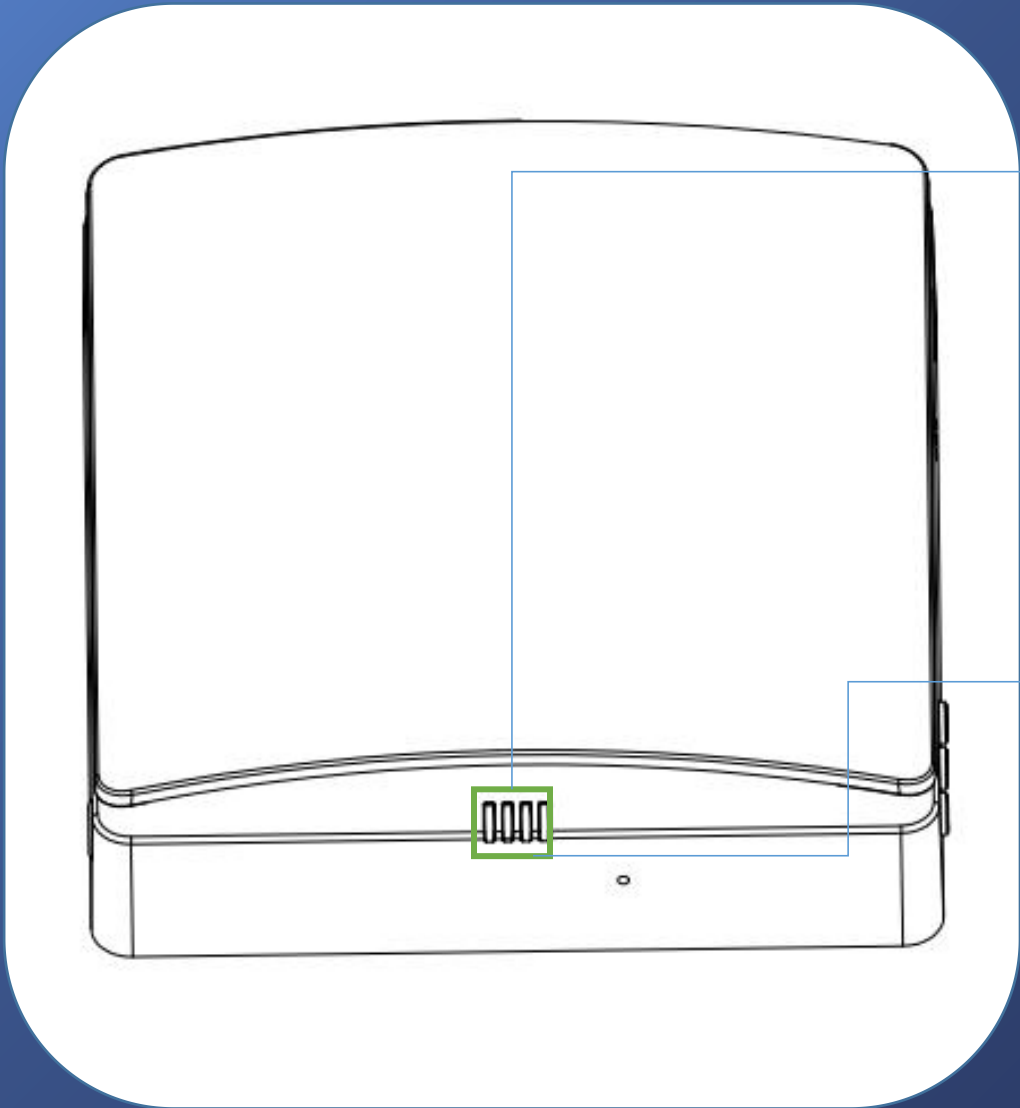


Speed button: when the ERV is on, selectable from speed 1 - 3

ON/OFF button



# Operation modes



## Status indicator - ERV ON statuses:

- Long blue indicator: pairing mode is activated, master ERV and slave ERV can be linked now.
- Long green indicator: IoT function is activated, WIFI connection is done.
- Long red indicator: the filter needs a replacement.
- Long purple indicator: the ERV is in master role and its IoT function is activated allows to be controlled by APP.
- Flashing green: AUTO Oxygen mode is running.
- Flashing blue: free-cooling function is running.
- Red flashes 3 times: filter clean is completed.

## Function indicator:





- 3 indicator refers to 3 speed;
- The green refers to supply mode;
- The red refers to extraction mode;
- The yellow refers to regeneration mode which is switched from supply mode to exhaust mode every 75s repeatedly;

## Status indicator - ERV OFF statuses:

- Slow flashing blue: the ERV is under pairing to be master ERV.
- Slow flashing green: the ERV is under pairing to be slave ERV.
- Slow flashing red: entering into WIFI mode

ECO Pair PLUS

# WIFI Control

-  *APP functions*
-  *Group and Pairing Control*
-  *Scene Control*
-  *Smart IAQ Control*



# ECO Pair PLUS WIFI function



1. ERV name

2. Master status or slave status

3. The outdoor real-time temperature

4. Filter alarm

5. Free-Cooling function: customized temperature range, if the ERV is under detects the outdoor temperature is within  $\pm 1^{\circ}\text{C}$  of your setting temperature, the ERV will switch to be supply mode for bringing more fresh air automatically.

6. CO2 concentration setting: customized exceeding CO2 concentration value, when the ERV works under regeneration mode, if the indoor CO2 exceeds the setting CO2 values, the ERV enters to Supply mode automatically until the CO2 value lower than the setting value.

7. Indoor real-time CO2 concentration

8. 12hrs timer

9. The remaining time after the scheduled shutdown

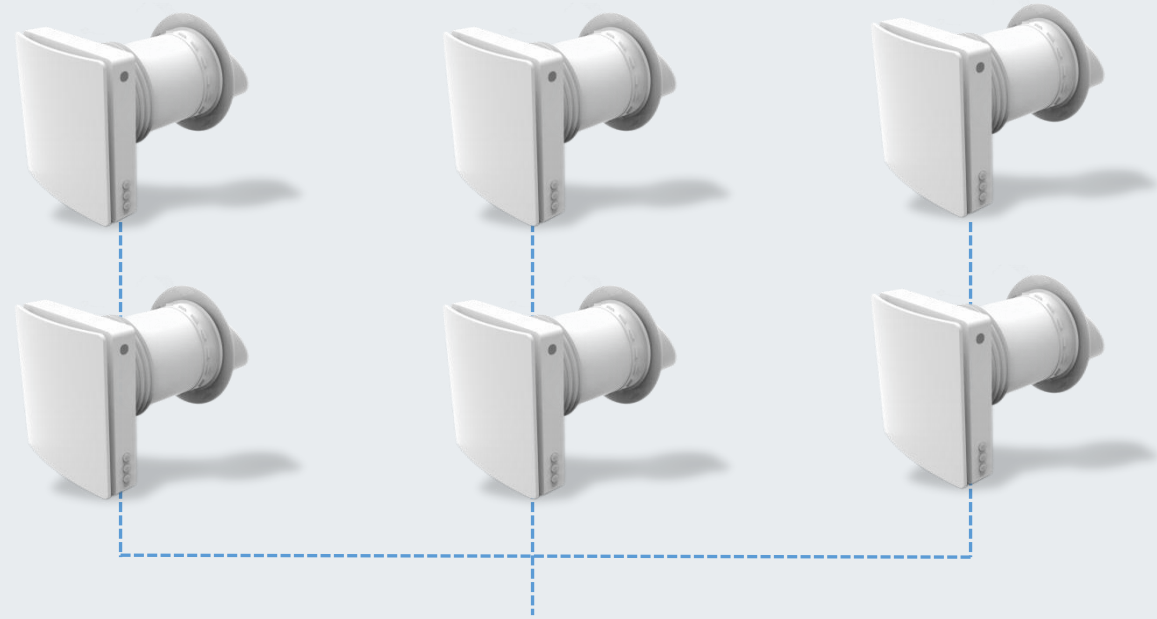
# ECO Pair PLUS WIFI function



10. ERV switch On/off
11. Running mode: supply mode, extraction mode, regeneration mode
12. 3 speed
13. Ultra strong mode: the ERV runs at highest power to supply and extract air
14. Auto oxygenation function ON/OFF
15. Free cooling function ON/OFF
16. Negative ion socket ON/OFF
17. Indicator lights ON/OFF

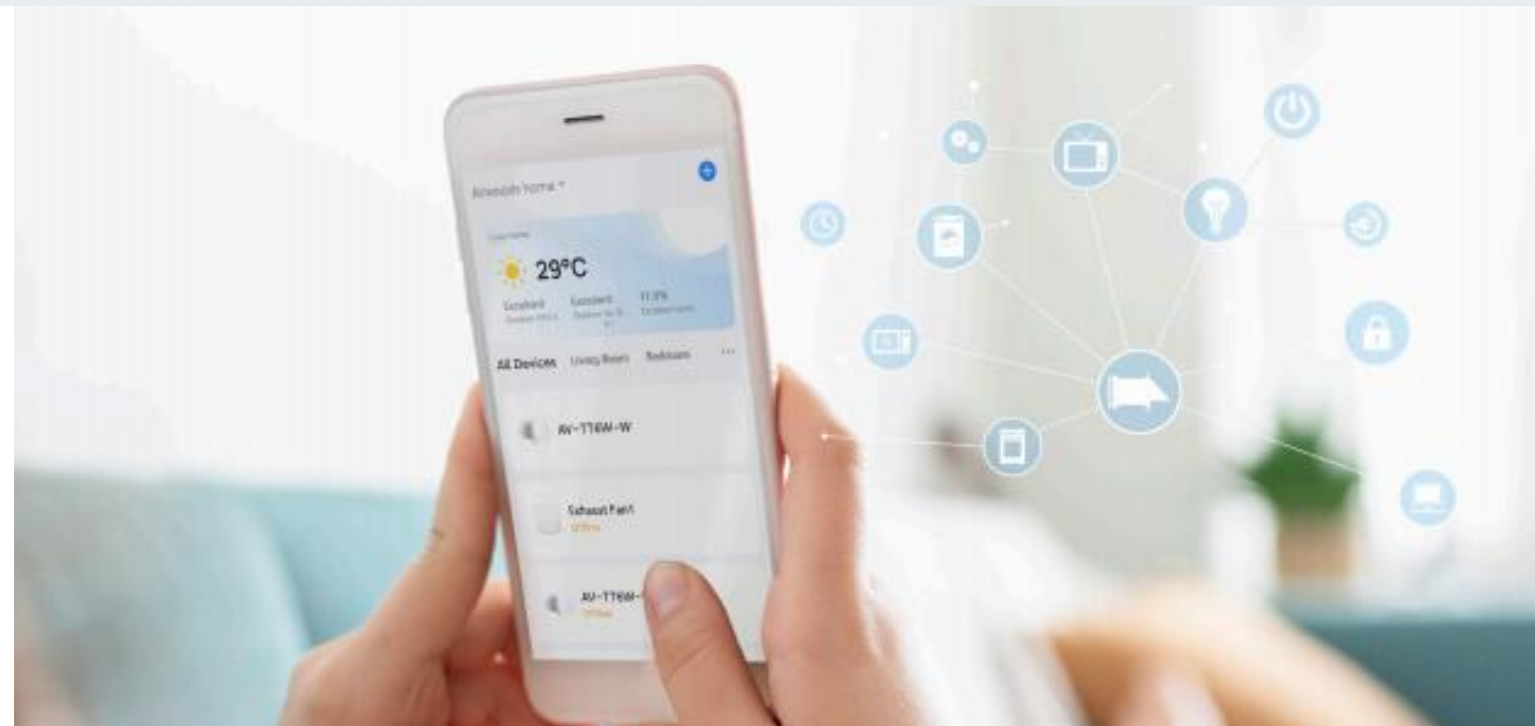
## GROUP CONTROL

The ventilator can create group control at the APP, the quantity is not limited. User can control all the ventilators in the group easily.



## Paring CONTROL

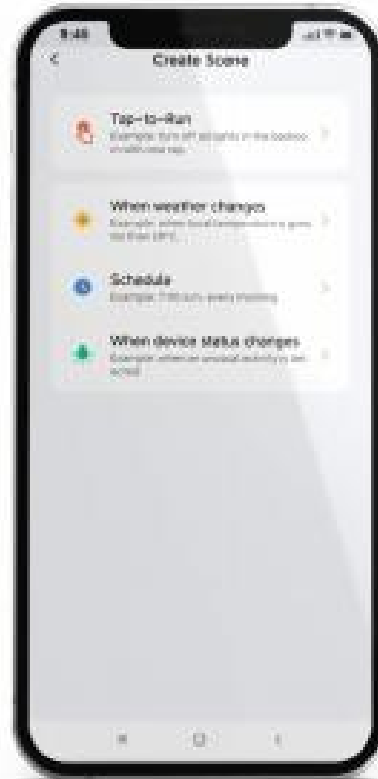
Users can add the devices with Tuya APP to their home screen. For example, they can add all the single room ventilators, exhaust fans or light switches in the APP and control them at their will.



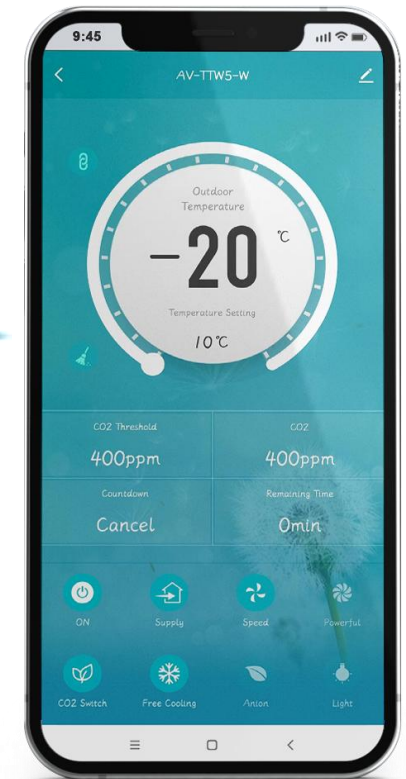
## SCENE CONTROL

User can create the scene according to the weather changes, schedule or the device status changes.

For example, when the weather shows the outdoor relative humidity is higher than 85%, user can set the ventilator to stop or run at exhaust mode, to prevent the outdoor humidity coming inside. The unit will run according to the setting automatically.



 85 %  
Exhaust Mode





**ECO PAIR ERV,  
EASIER ACCESS  
TO HEALTHY  
BREATH**