

HOLTOP

WALL MOUNTED ENERGY RECOVERY VENTILATOR



Multiple filters
purification of 99%



Indoor&outdoor air
filtration



High efficiency heat
and humidity recovery



Indoor slight positive
pressure



High efficiency
DC fans



Remote
control



CO₂/PM2.5
monitoring



Easy
installation





Delivering a healthy indoor environment

The indoor air can be many times worse than outdoor air. Exchange your indoor air with HOLTOP. In the pursuit of keeping our homes insulated and energy efficient we have also sealed in molds, bacteria, fungus, VOCs, allergens, carbon dioxide and carbon monoxide, all inevitably contributing to the potential for illness.

Between home, work and school, 90% of our lives are lived indoors. That's why the quality of your indoor air is of utmost importance. HOLTOP wall mounted ductless energy recovery ventilator will remove the indoor polluted air with ease and provide a constant supply of clean filtered air, allowing you and your family to live in an ideal indoor environment.



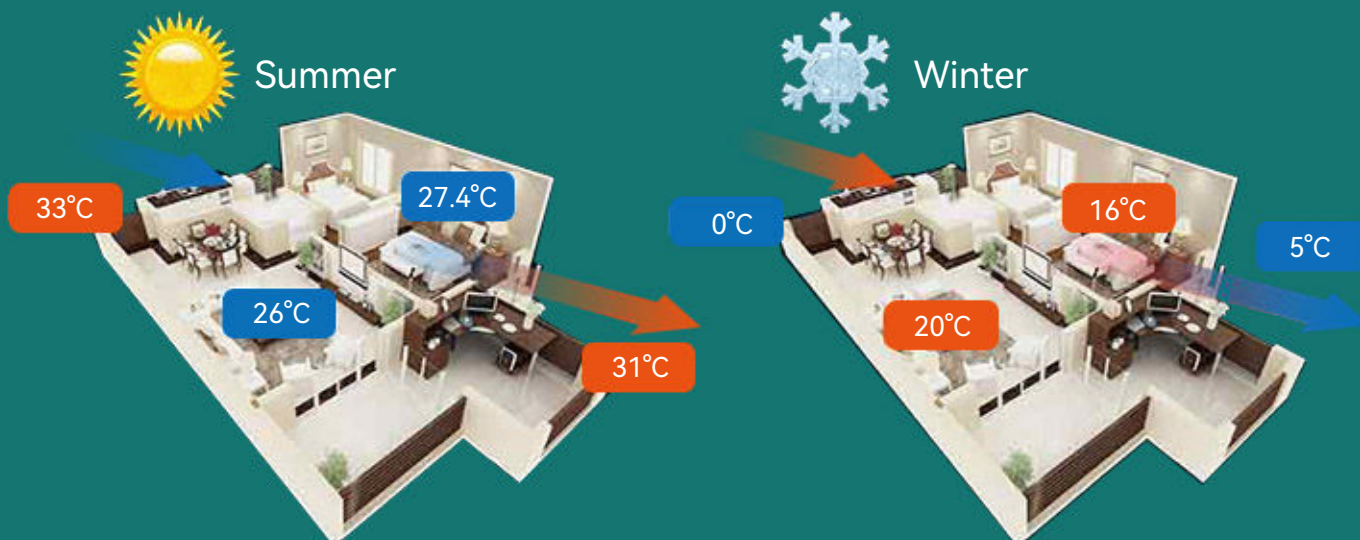
REDUCING THE ELECTRIC BILLS

Struggling with high electricity bills by using the air conditioner and wanna lower energy bill? Most ventilation systems drive up heating and cooling costs while decreasing indoor comfort. Much like venting a room by opening a window, ventilation systems can degrade energy performance because they expel air without capturing the heat. ERV systems conserve energy, lowering electric bills.

The ERV reduces the costs of heating ventilated air in the winter by transferring heat from the warm inside exhaust air to the fresh (but cold) outside supply air. In the summer, the inside air cools the warmer supply air to reduce cooling costs.

The heat from the exhaust air is transferred to the incoming air via a heat exchanger. The heat recovery efficiency is up to 82%. The ERV saves energy up to 30% compared to natural ventilation. This also helps reduce the size of the HVAC equipment needed because it doesn't have to work as hard to heat and cool when the intake air is conditioned by the ERV unit.

Because the ERV transfers some of the moisture from the exhaust air to the usually less humid incoming winter air, the humidity of the house air stays more constant. This also keeps the heat exchanger core warmer, minimizing problems with freezing.



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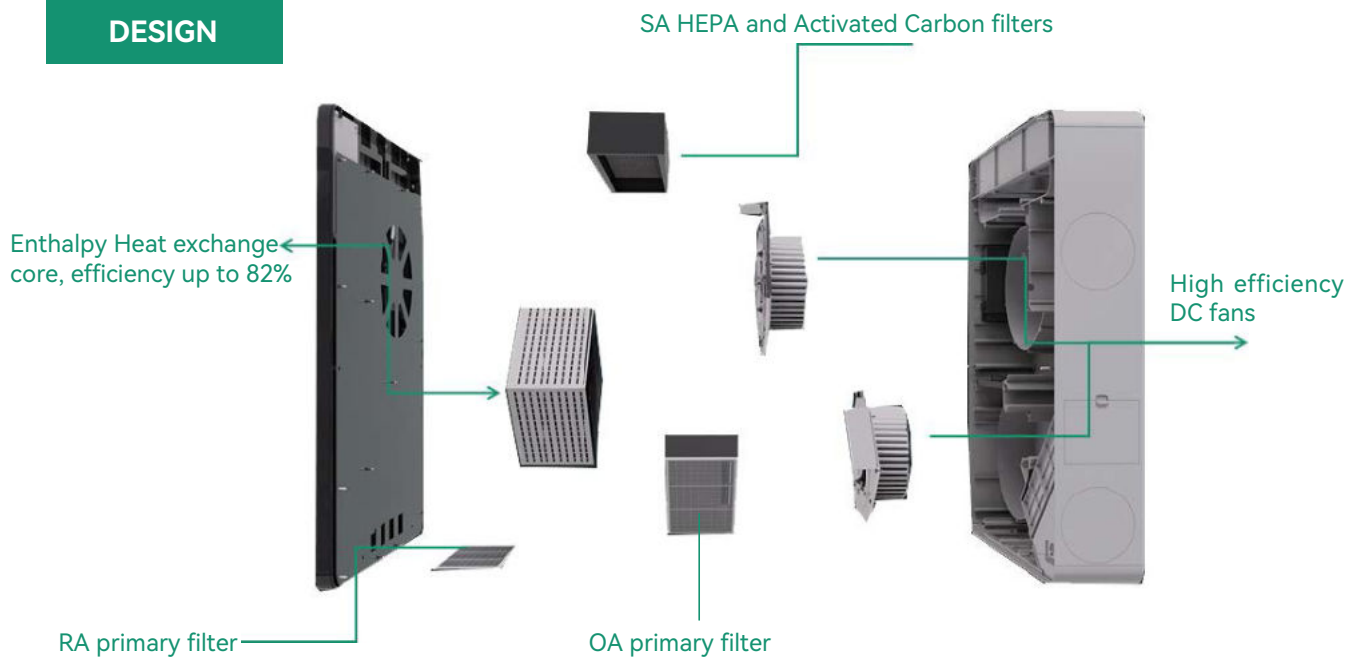
DUCTLESS TYPE ENERGY RECOVERY VENTILATOR

The single room ERV is designed for both residential and commercial spaces. Its ductless design is suitable for easy and highly efficient ventilation in the new or retrofitting buildings no need to run ducts anywhere in the room.

FEATURES

- Easy installation for ventilation in single room size 15-50m².
- Heat recovery efficiency up to 82%.
- Brushless DC motor with low energy consumption, 8 speeds.
- Silent operation noise (22.6-37.9dBA).
- Indoor air quality monitor (humidity + temperature + CO₂/PM2.5).
- Supply air purification with primary filter+medium filter+HEPA filter(H10) with activated carbon filter as standard, the PM2.5 purification efficiency is up to 99%.
- Thin and light weight and compact size.
- Two kinds of installation to suit room.
- Slight positive ventilation to ensure fresh air won't come through doors or windows without purification.
- Smart phone control Android / IOS.

DESIGN



CASING

The casing is integrated with a seamless and leak proof ABS frame made by molding. It has good quality of high strength, light weight, good insulation, smooth surface and easy to clean. The upper panel ensures convenient access to the replacement of HEPA filter and activated carbon filter. The OA primary filter and medium filter are at the side of the ventilator while RA primary filter is at the bottom of the unit. The unit has two inlets and outlet spigot with a diameter of 100mm for fresh air intake and stale air outlet.

AIR FILTRATION

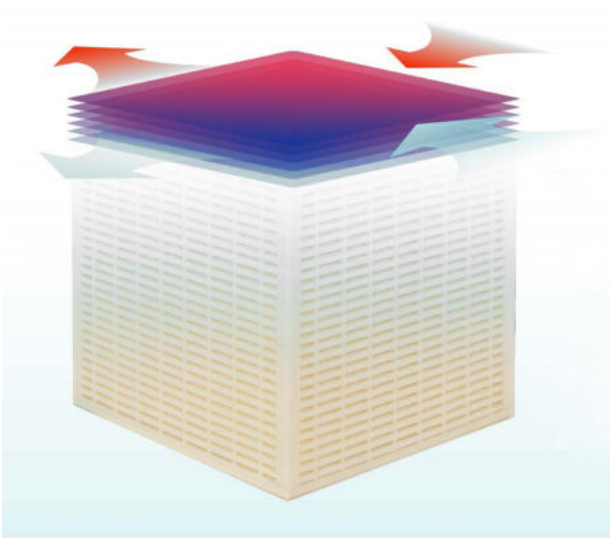
The primary filter, F5 filter, the HEPA H10 filter, and activated carbon filters are included at the supply air side. The purification efficiency of PM2.5 is up to 99%. The primary filter is included in the extract air side. Both primary filters are washable and durable for use for a long time. It can reduce the maintenance costs of the unit.



FANS

The unit takes advantage of using brushless DC motors and 8-speed regulation for supply air and exhaust air. freely adjust the air supply volume slightly larger than the exhaust air volume to form a slight positive pressure in the room to ensure that no pollutants can penetrate into the gaps such as windows and doors. The DC motor has strong vibration resistance with lower noise and smooth operation, good ability and stability.

ENTHALPY HEAT EXCHANGER (heat & humidity recovery)



The model ERVQ-B150-1B1 unit is equipped with a crossflow heat exchanger with enthalpy membrane. Membrane is made of imported pulp by special processing methods and adding some inorganic materials and fire retardant, to keep the heat exchange paper thin while maintaining high heat transmissibility, anti-tear properties, fireproof and keep the corrugated paper stiff and strong but thin.

Enthalpy heat exchanger was coated with a hygroscopic agent with high absorption and release ability on the surface. The small particle diameter water moisture molecule can pass while the bigger particle diameter like harmful gas or peculiar smell gas molecules can't pass, to make sure heat exchanger paper have strong penetrability, good selective ability and air tightness.

FUNCTIONING



CONTROL PANEL



1. The upper left corner is the WIFI connection status.
2. The upper right corner of the screen is the clock or timing status.
3. The upper central part of the screen is the current indoor CO₂ concentration / PM2.5 value.
4. The lower left side of the screen is the current room temperature and humidity values.
5. The lower right side of the screen is the current operation speed of the device.
6. At the bottom of the screen are three adjustable buttons.
7. "Auto" "Manual" "Timing" "Sleep" "PURE-L" "PURE-M" and "PURE-H" are mode indication.

CONTROL

- The unit is equipped with a control panel
- The remote control is supplied as standard
- Wi-Fi communication
- Controlled by Android or iOS smartphone or tablet



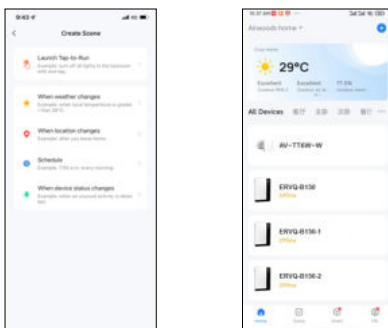
APP CONTROL

- Speed change over
- Filter replacement indication
- Alarm indication
- Speed setting
- Timer
- Weekly schedule
- Group control
- Scene control



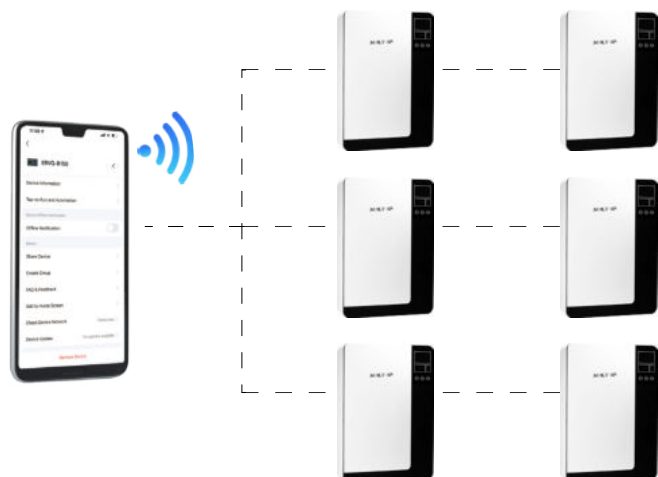
SCENE CONTROL

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 running, to prevent the outdoor humidity coming inside. On the other hand, users can add the devices with Tuya APP to their home screen. For example, they can add all the single room ventilator, exhaust fans or light switches in the APP and control them at their will.



GROUP CONTROL

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



Comprehensive Timely Monitoring, Intelligent Multiple Purification Modes Switch

Original function of “Pure L” “Pure M” “Pure H”, 30mins quick deeply clean



Timely display of CO₂/PM2.5, temperature and humidity

Manual/Auto/Timer mode optional

Remote controller for easy function switch

User manual of remote controller Button function introduction:

- Press “on” to turn on the ventilator.
- Press “off” to turn off the ventilator.
- Press “lock” to turn off the display; press it again to turn on the display.
- Press “Hour”, the “Hour” section at the top right corner of the ventilator screen starts flashing, then press “+” to increase time, press “-” to decrease time. Press the “Hour” button again to save time and exit.
- Press “Minute”, the “Minute” section at the top right corner of the ventilator screen starts flashing, then press “+” to increase time, press “-” to decrease time. Press the “Minute” button again to save and exit. Remark: During flashing, if no operation is performed within 15s, flashing stops and settings are saved automatically.
- Except for the status of time adjustment and being shut down, press “+” to change the speed range from low to high, press “-” to change the air speed range from high to low. When switching to “Manual” mode, the SA indicator flashes. Press “+” or “-” to adjust the SA speed. After completing the SA speed setting, press “Pure H” to switch to the air speed selection of EA (Under this state, the “Pure H” button is equivalent to the “Mode” button). Press “+” or “-” to adjust the air speed. After completing the EA speed setting, press the “Pure H” button again to exit the speed setting (or exit automatically without action for 15s). The air speeds of SA and EA will be saved separately.
- The function of the “Sleep” button is similar to the “Sleep” button on the ventilator.
- The function of the “Auto” button is similar to the “Auto” button on the ventilator.
- Timer: Press “Timer” to activate timer mode, and the time at the top right corner of the machine screen flashes. Press “+” to increase time and “-” to decrease time at 30-minute intervals. The maximum timing duration is 8 hours, and the default timing is 00:00. Press the “Timer” button again to save and exit the timer setting, and the top right corner of the ventilator will display the current time again.
- The functions of “PURE L”, “PURE M”, “PURE H” are similar to those on the ventilator. Remark: During flashing, if no operation is performed within 15s, flashing stops and settings are saved automatically. After timer setting is finished, pressing the “Timer” button again will make the top right corner of the display show the remaining time of the timer. At this time, you can reset the timer. To cancel the timer function, set the time to 00:00.

For model ERVQ-B150-1B1(H01), under mode “Auto”, the ERV will adjust supply air volume according to indoor PM2.5 range, corresponding speed as below:

PM2.5 Value	Status	Operational Speed
0≤PM2.5≤35	Excellent	1
35<PM2.5≤75	Good	2
75<PM2.5≤115	Light Pollution	4
115<PM2.5≤150	Medium Pollution	5
150<PM2.5≤250	Heavy Pollution	7
250<PM2.5	Serious Pollution	8

For model ERVQ-B150-1B1(H02), under mode “Auto”, the ERV will adjust supply air volume according to indoor CO₂ range, corresponding speed as below:

CO ₂ Value	Status	Operational Speed
0≤CO ₂ ≤450	Excellent	1
450<CO ₂ ≤1000	Good	3
1000<CO ₂ ≤1500	Light Pollution	5
1500<CO ₂ ≤2000	Medium Pollution	7
2000<CO ₂	Serious Pollution	8

Remark: To ensure sufficient indoor fresh air supply, the speed will rise automatically after model “Auto” runs for some time, 5-10 minutes later it will return to previous speed. During this time, the screen shows different speed from above chart.

Technical Parameters

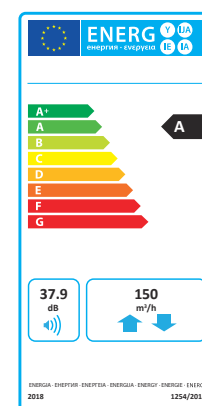
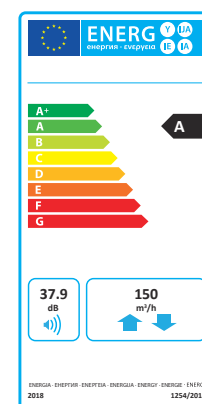
Model	ERVQ-B150-1B1(H01)	ERVQ-B150-1B1(H02)
Supply Airflow [m³/h]	50-150	
Voltage [V/50(60)Hz]	110-240	
Max. unit power [W]	43.8	
Max. unit current [A]	0.37	
Sound pressure level at 1.5 m distance [dBA]	23-36	
Transported air temperature [°C]	-15~+40	
Casing material	ABS	
Motor type	DC Type, 8 Speeds	
Filtration efficiency [%]	99% HEPA	
Filtration mode	Pure High, Pure Medium, Pure Low	
Temperature efficiency [%]	82	
Enthalpy efficiency (Heating) [%]	58	
Enthalpy efficiency (Cooling) [%]	52	
Control	Touch Screen Panel / Remote control	
Air quality display	PM2.5, Temperature and Relative Humidity	CO₂, Temperature and Relative Humidity
Operational Mode	Manual / Auto / Timer / Sleep	
Suitable room size [m²]	20-45	
Dimension [mm]	450*155*660	
Weight [kg]	10	

Remarks: The equipment has indoor air purification function, under maximum air supply volume of 150 cmh, about 60 cmh of indoor circulating air. It's helpful to further clean the indoor air and reduce the PM2.5 level.

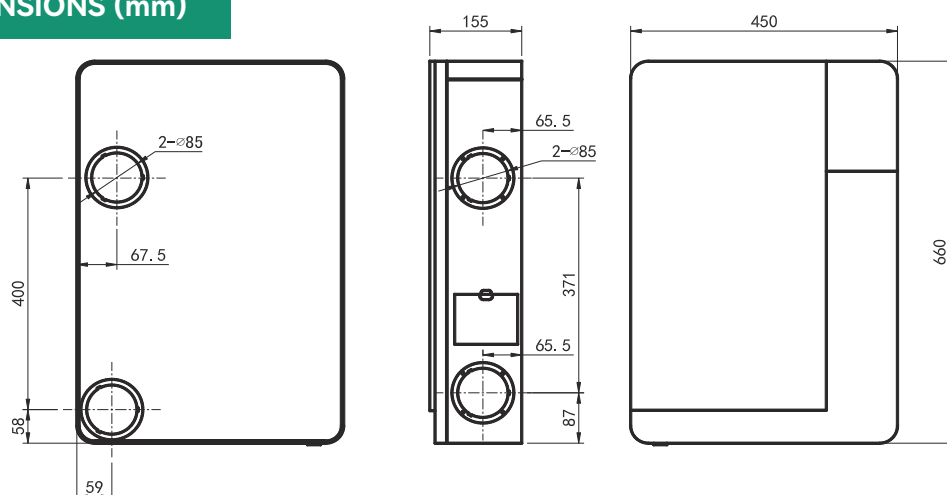
Ecodesign Information

According to Regulation EU No 1253/2014 of the European Commission, implementing Directive 2009/125/CE of European Parliament

Model	ERVQ-B150-1B1(H01)		ERVQ-B150-1B1(H02)	
Specific energy consumption (SEC) [kWh/(m².a)]	Cold		Average	
	-79.28	A+	-40.95	A
Type of ventilation unit	Bidirectional			
Type of drive installed	Eight speed			
Type of heat recovery system	Recuperative			
Thermal efficiency of heat recovery [%]	82%			
Maximum air flow rate [m³/h]	150			
Power [W]	43.8			
Sound power level [dBA]	37.9			
Reference air flow rate [m³/s]	0.0417			
Reference pressure difference [Pa]	0			
Specific power input (SPI) [W/(m³/h)]	0.292			
Control typology	Local demand control			
Maximum internal leakage rate [%]	3.5			
Maximum external leakage rate [%]	5			
Mixing rate of bidirectional units [%]	20			
Airflow sensitivity at +20Pa and -20Pa	27			
The classification of the indoor/outdoor air tightness [m³/h]	7			
Internet address	www.holtop.com			
The annual electricity consumption (AEC) [kWh electricity/a]	Cold		Average	
	7.54		2.16	
The annual heating saved (AHS) [kWh primary energy/a]	Cold		Average	
	89.4		45.7	



DIMENSIONS (mm)



INSTALLATION ACCESSORIES

The package includes all the accessories needed for the installation. Users don't need to prepare extra accessories and save costs.

INSTALLATION

Installation at the back



Installation at the side





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