

THE BEST JUST GOT BETTER



SMART VENTILATION



Automatic Fresh Air Measurement & Control

Integrated pollutant sensors automatically activate fresh air ventilation



Fresh Air Ventilation & Recirculation Modes

Recirculation adds heating or cooling to unify comfort and indoor air quality



Heat Pump Energy Recovery & Conditioning

Energy Exchange with active heating, cooling, and dehumidification



Variable Speed Compressor & ECM Fans

Superior efficiency with variable speed compressor and fan control



Elegant Controls & Internet Connected

Easy to use color touchscreen controller with internet control and monitoring



Designed & Built in the USA

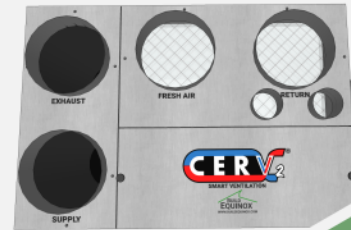
Manufactured in a 100% solar powered facility in Urbana, Illinois

LEARN MORE AT WWW.BUILDEQUINOX.COM



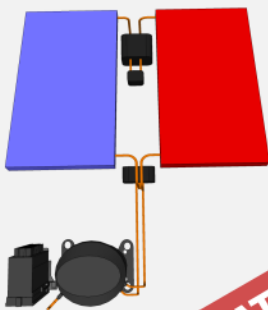
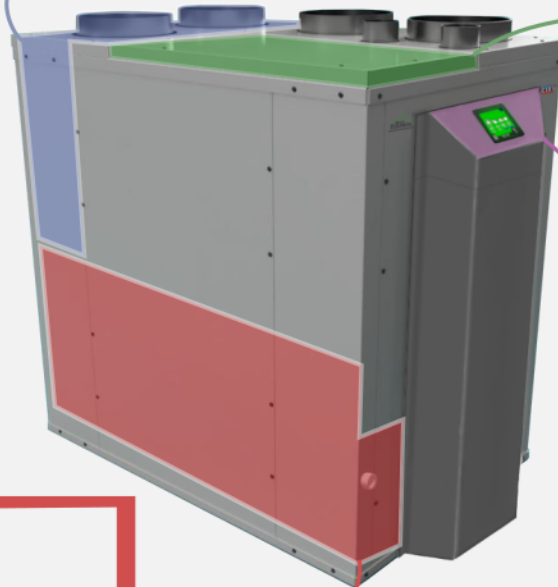
ECM FANS

The CERV uses the latest ECM fan technology to deliver fresh air efficiently and quietly. The CERV's intelligent controls maximize fresh air delivery, ensuring your home stays fresh, comfortable, and healthy.



FILTERED AIR

The CERV's filter access panel allows the homeowner easy access to inspect and replace both indoor and outdoor filters. The CERV accepts standard 10x20 size, with your choice of filtration. MERV 13 comes standard with the unit.

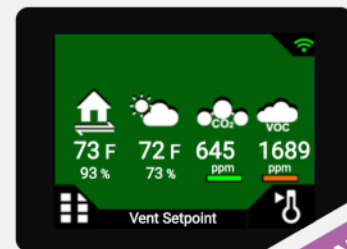


HEAT PUMP

Instead of an ERV exchanger core, the CERV uses a high efficiency heat pump to exchange energy between incoming supply and outgoing exhaust air.

What does this mean?

Conditioned, comfortable air unifies the home instead of dragging exterior rooms away from comfort. In the summer, the CERV also helps with dehumidification



SMART CONTROLS

A built in 3.5" full color capacitive touchscreen makes interaction with the CERV a pleasure. Monitor your indoor air quality, change your setpoints, and configure the CERV to best suit your home and lifestyle with ease.



INDOOR AIR QUALITY



The CERV monitors both CO₂ and Volatile Organic Compound (VOC) levels inside your home to determine when ventilation is necessary. Many gasses are undetectable to the human nose,

yet can cause significant impairment to health, cognition, and sleep quality. Even though you can't smell them, the CERV can.

COMFORT

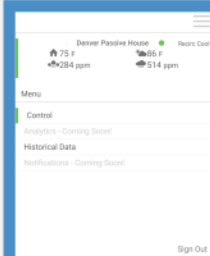


While the CERV is small in capacity, its capabilities are anything but. By measuring indoor and outdoor temperature and relative humidity levels, the CERV knows the most efficient way to keep your home healthy and comfortable

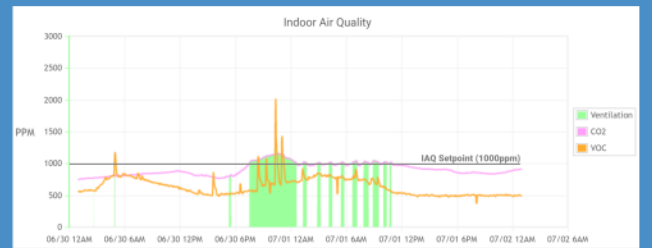
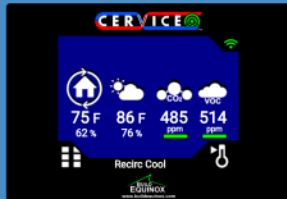
ONLINE CONTROL & MONITORING



The CERV is the only system that gives you the information you need to know that your family is breathing the highest quality air. CERV-ICE online control and monitoring allows you to check your air quality and change settings and setpoints from anywhere in the world using your mobile device. You can also view and download historical temperature, relative humidity, and indoor air quality data. CERV-ICE comes standard and has no monthly fee!

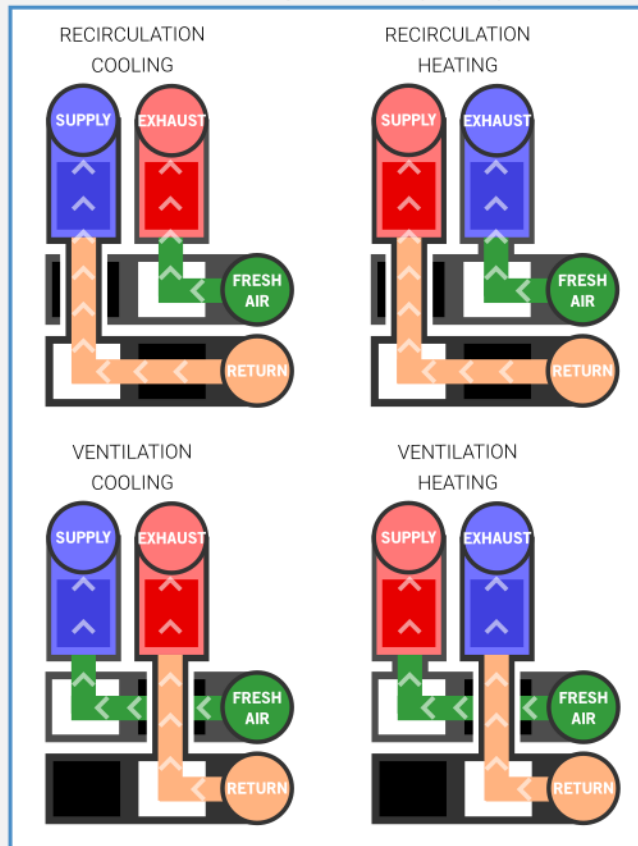


CERV-ICE DASHBOARD



CERV-ICE HISTORICAL DATA

HEAT PUMP MODES




CERV OPERATION MODES



You wouldn't buy a car without a speedometer, so why buy a ventilation system that doesn't measure air quality? Indoor air pollutants must be measured for efficient management, and the CERV does just that. Built-in **CO₂ and VOC (volatile organic compound) sensors** automatically **measure and maintain excellent air quality** in your home. Your family's health is too important for guesswork.

Energy recovery taken to a new level. The CERV's **super-efficient inverter drive heat pump** technology surpasses traditional ERV/HRV systems. When you're stuck inside on the coldest day of the year, you need fresh air the most - the CERV has **no low temperature operation restrictions**, so the fresh air can keep flowing. Home occupants in warm/humid climates will appreciate the CERV's ability supply **cool, dehumidified fresh air** to the house. If that wasn't enough, the CERV's **unique recirculation mode** provides additional conditioning when fresh air is not needed, significantly improving comfort. If you have a heat pump water heater or heat pump dryer, you will be pleased to know that the CERV has two **utility ducts**. Even with small utility rooms, they will no longer be over-cooled/over-heated, as the CERV's utility ducts can provide much needed airflow to these areas.

Innovative controls further set the CERV apart from other ventilators. Built with the **user experience** in mind, our color touchscreen controller is easy to read and **simple to use**. For users interested in web connected devices, the CERV's built in Wifi gateway called CERV-ICE opens up a world of **ventilation control never before seen**. Control your CERV from anywhere, access archived data, receive system notifications and updates, read your home health reports, and more! All from your computer, tablet, or mobile device.

	"Natural" Ventilation	HRV Heat Recovery Ventilator	ERV Energy Recovery Ventilator	
Sensible Energy Recovery	✗	✓	✓	✓
Conditioned Air Delivery	✗	✗	✗	✓
CO ₂ Monitor & Control	✗	+\$	+\$	✓
VOC Monitor & Control	✗	+\$	+\$	✓
Recirculation & Mixing Mode	✗	✗	✗	✓
Utility Duct Energy Mixing	✗	✗	✗	✓
Online Control & Monitoring	✗	+\$	+\$	✓
Home Health Feedback Reports	✗	✗	✗	✓

SPECIFICATIONS

Electrical

Voltage Supply	120V (60hz)
Minimum Circuit Size	12 A
Connection	Standard NEMA 5-15P Plug, 6ft cord

System

Airflow Rate	100-300 CFM
Air Filter Size	10"x20"x1"
Duct Size	8" Main 3" Utility
Condensate Drain	3/4" PVC
System Weight	6EC:139lbs 8EC:142lbs

Sensors

Temperature	- 40 to 185F +/- 0.36F
Relative Humidity	0 to 100% +/- 2%
CO ₂	400 to 5000ppm +/- 25ppm +/-3%
VOC	450 to 2000ppm CO2 Equivalent

VOCs Detected

Alcohols, Aldehydes, Aliphatic Hydrocarbons, Amines, Aromatic Hydrocarbons, CO, CH₄, LPG, Ketones, Organic Acids

Warranty

5 Years

PERFORMANCE

Heating: 47F Outside, 68F Inside

Heating Capacity (Btu/h)	4731 (Recirc)* 6531 (Vent)**
Heating Efficiency (COP) (excludes fan power - see below)	3.6 (Recirc) 4.8 (Vent)
Heating Elec Power (W) (excludes fan power - see below)	379 (Recirc) 399 (Vent)

Heating: 32F Outside, 68F Inside

Heating Capacity (Btu/h)	3702 (Recirc) 6789 (Vent)
Heating Efficiency (COP) (excludes fan power - see below)	3.3 (Recirc) 5.4 (Vent)
Heating Elec Power (W) (excludes fan power - see below)	331 (Recirc) 366 (Vent)

Heating: 17F Outside, 68F Inside

Heating Capacity (Btu/h)	2674 (Recirc) 7046 (Vent)
Heating Efficiency (COP) (excludes fan power - see below)	2.8 (Recirc) 6.2 (Vent)
Heating Elec Power (W) (excludes fan power - see below)	283 (Recirc) 332 (Vent)

Cooling: 95F(DB)/75F(WB) Outside, 80F(DB)/67F(WB) Inside

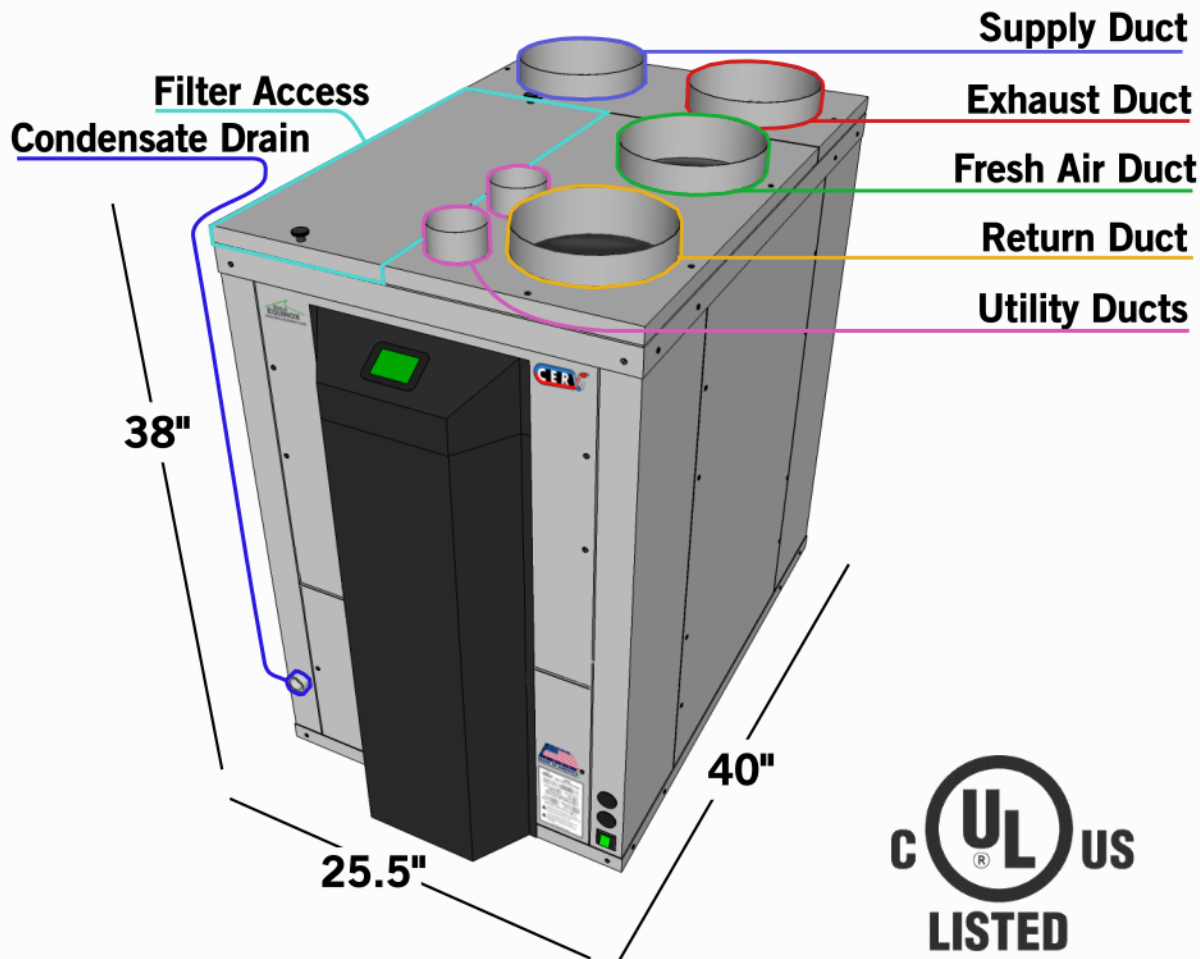
Total Cooling Capacity (Btu/h) Sensible + Latent	2230 (Recirc) 5314 (Vent)
Sensible Cooling (Btu/h)	1318 (Recirc) 3891 (Vent)
Latent Cooling (Btu/h)	912 (Recirc) 1423 (Vent)
Dehumidification (Liters/Day)	9.6 (Recirc) 14.9 (Vent)
Cooling Efficiency (COP) (excludes fan power - see below)	3.2 (Recirc) 7.6 (Vent)
Cooling Elec Power (W) (excludes fan power - see below)	202 (Recirc) 204 (Vent)

Fans

Total Fan Power (W)	38.6(50% Speed)
ECM Fans (heating & cooling)	98.1(70% Speed)

* Recirculation mode heating and cooling capacity is relative to indoor conditions

** Ventilation mode heating and cooling capacity is relative to outdoor air conditions

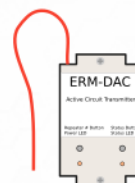


Wireless Low-Power EnOcean Devices



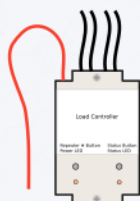
Battery Free Ventilation Switches

- Remote Switches trigger timed fresh air ventilation
- Individually configurable for CFM, zone, and length
- Ideal for Bathroom & Kitchen Venting
- Available in many colors



Active Circuit Transmitter

- Monitors circuit for activity, vent when active
- Individually configurable for CFM, zone, and length
- Ideal kitchen vent hoods



Wireless Relay

- On/Off control like auxiliary output
- Can be used for Geo Boost, duct heater, etc.
- 24VAC or 120-277VAC options available



Remote Temperature, RH, & CO₂

- Remote measurement for bedrooms & bathrooms
- RH and CO₂ may be used to trigger ventilation
- Solar powered, no batteries required!



Wireless CERV Controller

- Remotely monitor and control the CERV in your home
- Great for difficult to access CERV installations
- Included base for wall-mounting

Wired Add-Ons



Ground Loop Heat Exchanger

- Pre-heating and pre-cooling for the CERV
- Boosts capacity and efficiency
- Smart algorithms activate when beneficial



Zone Damper Control

- Optimize your home's air delivery system
- Targeted pollutant removal from areas
- Pairs well with wireless ventilation switches
- Supply fresh air to areas with greatest need

*May require I/O Expansion Board



I/O Expansion Board

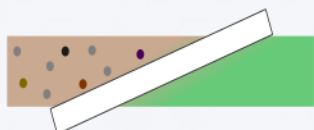
- Adds 6 dry contact/24VAC outputs
- Adds 3 dry contact/24VAC sense inputs
- Control external heating, cooling, ventilation, moisture control, GEO-Boost, & more!
- Simple installation & configuration



Inline Duct Heater

- Best for backup heat in climates with low loads
- 2.5kW and 5kW versions available
- Installs easily with standard ductwork.

Other Options



OEM CERV Filters

- 10"x20"x1" MERV 13 filters for fresh air and return
- Optional Carbon style for smoke and odor protection
- Boxes of 3, 6, 12, & 24 available



Duct Silencer

- Many duct sizes available
- Significantly reduces fan/duct noise
- Easy installation
- Great for large homes with extensive ductwork requiring high airflow



1-773-492-1893



Build Equinox's 100% solar powered facility
Urbana, IL

