

SenseAir

Heat Recovery Ventilation (HRV) Systems

technogen[®]

smart solutions for HVAC

Contents

SenseAir

4

Overview

5

Technical Data &
Dimensions

6

Airway Orientation

7

Accessories

technogen®

SenseAir

New Gen Heat Recovery Systems

Heat Recovery Ventilation (HRV) Systems

Heat Recovery Ventilation (HRV) systems play a crucial role in promoting healthy, energy-efficient indoor environments. By recovering heat while maintaining high indoor air quality, these systems are an essential component of modern building design.

Technogen SenseAir Heat Recovery Ventilation units are advanced mechanical systems engineered to facilitate the efficient exchange of indoor and outdoor air while minimizing energy loss. Primarily used in residential settings, these units help maintain optimal indoor air quality, reduce energy consumption, and enhance occupant comfort.

The **SenseAir** HRV systems operate by extracting stale air from key areas within a building—such as bathrooms, kitchens, and living spaces—and simultaneously introducing fresh outdoor air. At the core of each unit is a high-efficiency heat exchanger, which transfers thermal energy from the outgoing air stream to the incoming fresh air. This heat recovery process pre-conditions the incoming air, significantly reducing the energy needed to heat or cool it to the desired indoor temperature.

Plug-and-Play Connectivity

Our devices feature externally mounted electrical connections, accessible through clearly labeled, dedicated sockets. This intuitive plug-and-play design streamlines installation, eliminating the need for professional assistance. Users can simply connect the appropriate accessory cables to their corresponding sockets for immediate, hassle-free operation—right out of the box.

Humidity control

Technogen SenseAir devices are equipped with intelligent humidity control capabilities that help maintain a comfortable and healthy indoor environment. By monitoring indoor humidity levels, the system can automatically adjust ventilation rates to prevent excess moisture buildup, reduce the risk of mold growth, and enhance overall air quality. This smart regulation ensures optimal indoor comfort throughout the year, regardless of external weather conditions.

Mainboard and Extension Modules

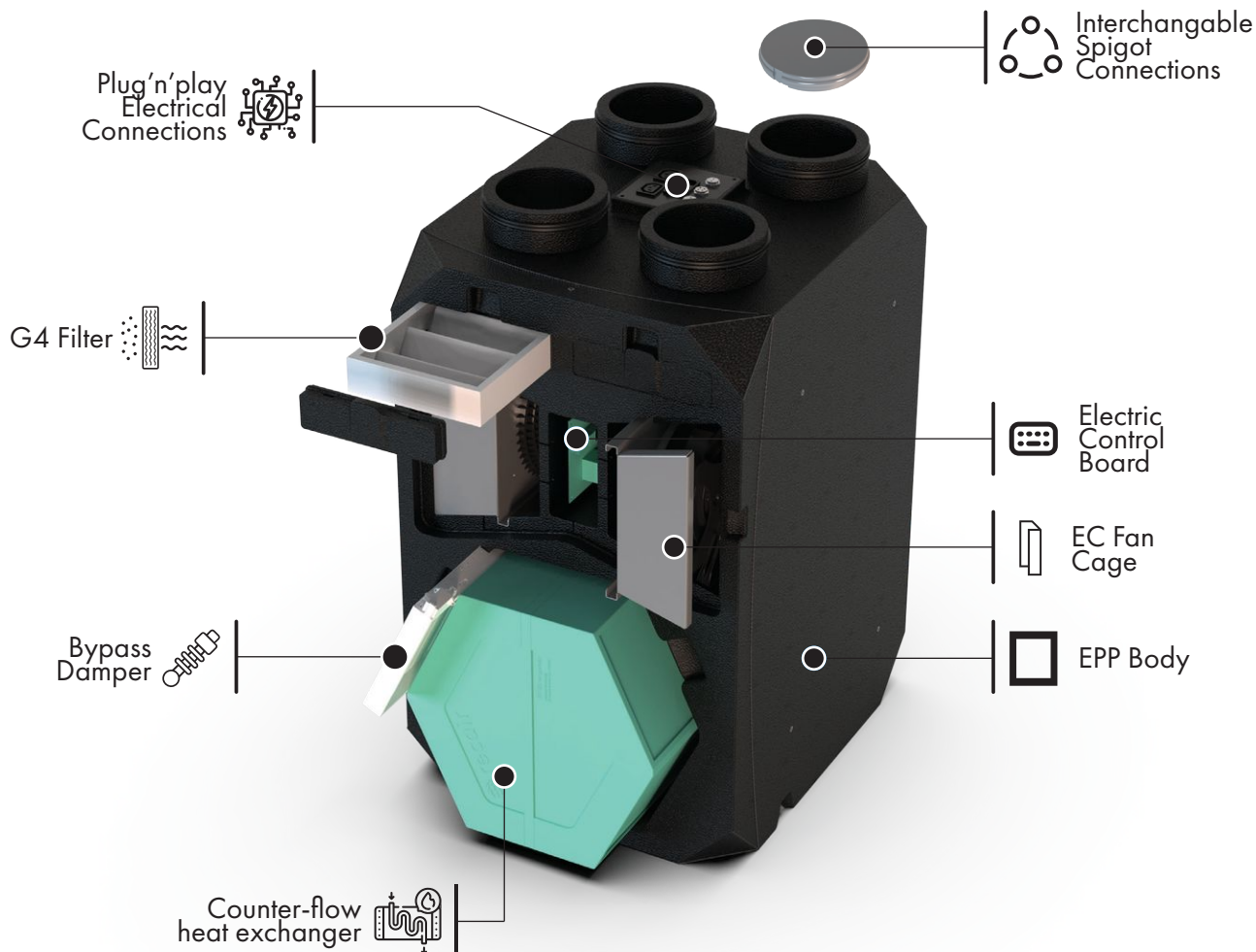
The core mainboard of our system supports a comprehensive range of standard ventilation features, including automatic bypass damper control, weekly scheduling, and integrated Wi-Fi connectivity. However, we recognize that ventilation requirements can vary between projects and may evolve over time due to new building regulations or user needs.

With future-readiness in mind, our devices are designed to accommodate a variety of extension modules. These modules enable additional functionality, allowing for easy upgrades without the need to replace the entire unit. If your project requires a specialized feature, we may be able to provide it through a compatible extension module—ensuring your system remains adaptable and compliant long into the future.



SenseAir

Overview



Body

Expanded Polypropylene (EPP) is a versatile and lightweight plastic foam material derived from polypropylene through a molding and expansion process. EPP is valued for its versatility and performance in a wide range of industries and applications where its lightweight, impact-absorbing, and insulating properties make it a perfect body material for HRV units.

Filters

Technogen SenseAir HRV have 2 filters on both supply and exhaust air streams. These filters clean the incoming air by removing dust, allergens, and other pollutants. This ensures that the indoor air remains fresh and healthy while keeping the inside of the device clean and protected.

Controls

Technogen SenseAir HRV system comes with advanced controls that allow users to adjust settings based on their preferences. These controls include fan speed controls, filter alarms and sensor readings and smart features such as automatic boost modes and weekly scheduling.

Heat Exchanger

The heart of the **Technogen SenseAir** HRV system is the high efficiency counter-flow heat exchanger. This component facilitates the transfer of heat between the outgoing and incoming air streams without direct mixing.

EC Fans

Low energy fans with backward curved blades and EC motors are responsible for moving the air through the system. They extract stale air from the building and introduce fresh air from outside.

IoT Functionality

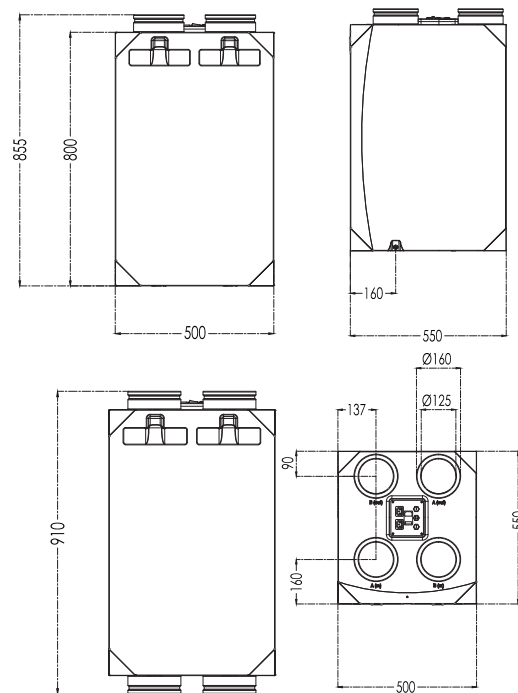
WiFi connection is standard on all **Technogen SenseAir** HRVs, they can easily connect to our re-designed Technogen Connect mobile app to offer you control over your ventilation wherever you are.

SenseAir

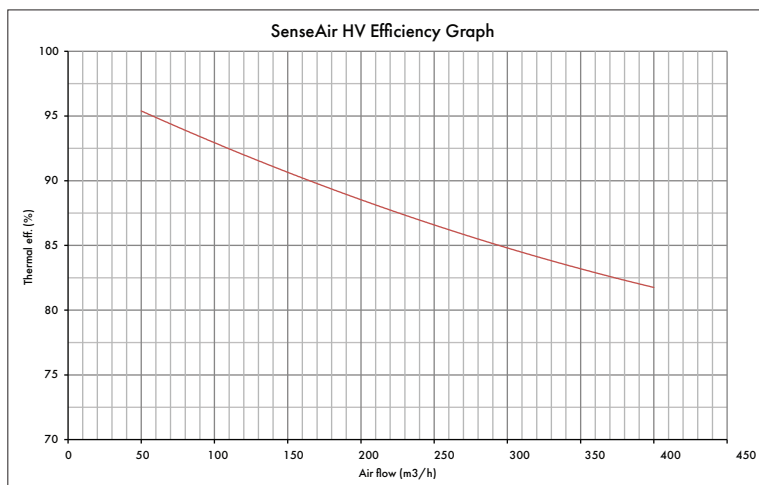
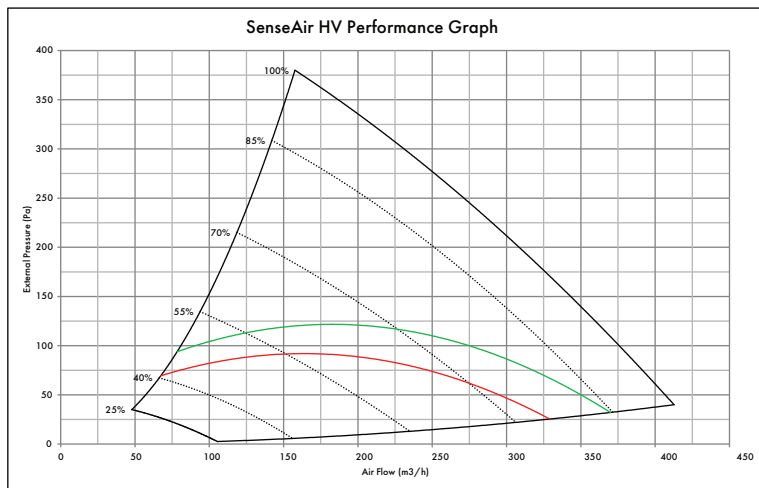
Technical Data and Dimensions

Technogen SenseAir

Energy class	A+
Max. air flow (@100 Pa)	375 m³/h
Max. thermal efficiency	90 %
Supply voltage	230V AC 50Hz
Max. Electric Power	150 W, 0.7 A
Casing material	Expanded Polypropylene (EPP)
Dimensions (LxWxH)	550x500x850 mm
Weight	18 kg
Heat Exchanger type	Plastic counter flow (optional enthalpy)
Fan & Motor type	Backward-curve fans with EC motors
Filter class	2 x G4 filter (optional F7)
Duct Connections	both Ø 160 mm and Ø 125 mm
Condensation drain	Ø 20 mm
Mounting Options	Horizontal (both Left and Right) - Vertical (both Top and Bottom)
Operating temperatures	-25°C to +60°C



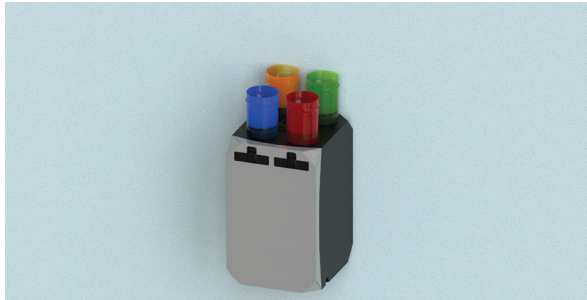
Performance Graphs



SenseAir

8 Different Airway Orientation

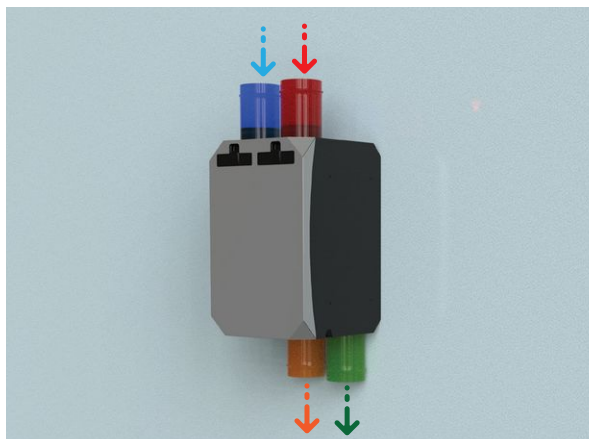
Vertical Top In / Top Out Left
V-TITO-L



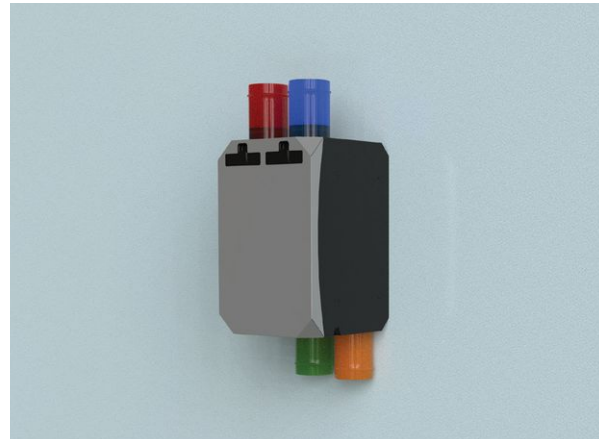
Vertical Top In / Top Out Right
V-TITO-R



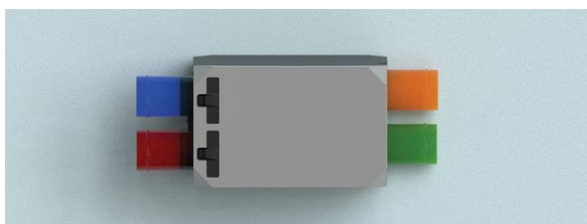
Vertical Top In / Bottom Out Left
V-TIBO-L



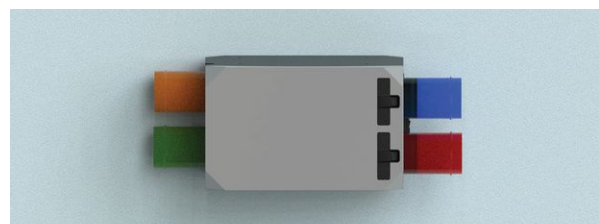
Vertical Top In / Bottom Out Right
V-TIBO-R



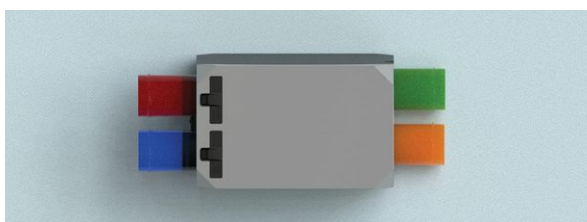
Horizontal Left in / Right out Top
H-LIRO-T



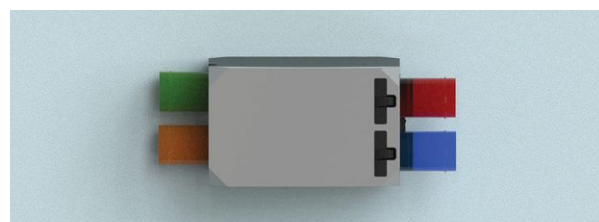
Horizontal Right in / Left out Top
H-RILO-T



Horizontal Left in / Right out Bottom
H-LIRO-B



Horizontal Right in / Left out Bottom
H-RILO-B



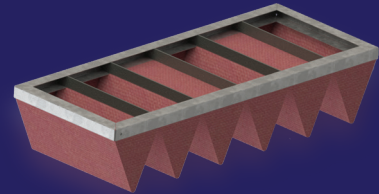
● Fresh air in ● Extract air in ● Exhaust air out ● Supply air out

SenseAir

Accessories

F7 Filter

Our systems come equipped with standard G4 filters, which effectively capture dust and larger airborne particles to maintain basic indoor air quality. For environments requiring higher levels of protection—particularly for individuals with allergies or respiratory sensitivities—we recommend upgrading to F7-grade pollen filters. These high-performance filters are designed to capture finer particles, providing enhanced air purification and contributing to a cleaner, healthier indoor environment.



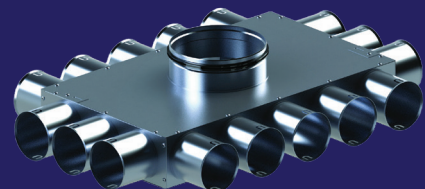
Silencer

We designed Technogen Heat Recovery Units to be as quiet as possible; however, you may need to further reduce the noise levels in some situations. In such cases, you have the option to incorporate either a duct-type silencer or a flexible silencer for tighter spaces directly into the supply vent.



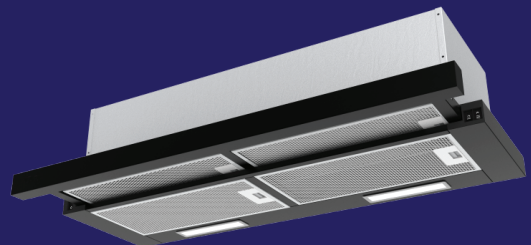
Distribution Boxes

Our Box Systems are intelligently crafted solutions designed to optimize airflow and maintain superior indoor air quality within homes. These compact and reliable distribution boxes serve as central points for efficiently channeling ventilation throughout the house.



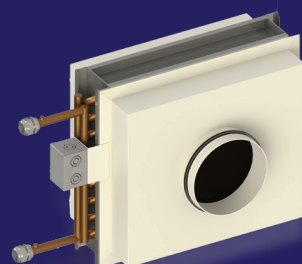
Kitchen Hood

Our Residential Kitchen Hood is designed to work together with Notus. By connecting your SenseAir unit to our Kitchen hood, the Kitchen boost function will be open. Whenever you start cooking, SenseAir unit will balance the pressure inside the house and remove the Smoke, Odors from the rest of the house.



Water-Heater

Our Residential Kitchen Hood is designed to work together with Notus. By connecting your Notus unit to our Kitchen hood, the Kitchen boost function will be open. Whenever you start cooking, SenseAir unit will balance the pressure inside the house and remove the Smoke, Odors from the rest of the house.

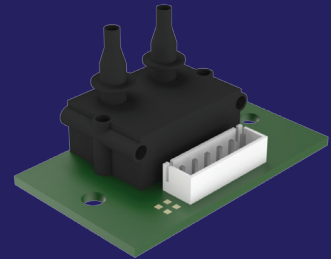


SenseAir

Accessories

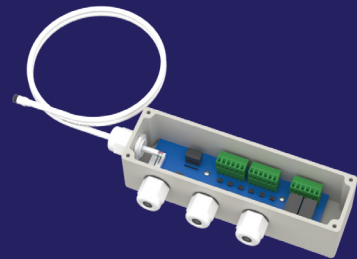
Constant Air-Flow Module

The Constant Airflow Module is engineered to maintain balanced ventilation by regulating airflow instead of fan speed, even as pressure conditions change (e.g., when filters become dirty). Users can set specific airflow values rather than fan speeds, ensuring consistent and even air distribution throughout their home.



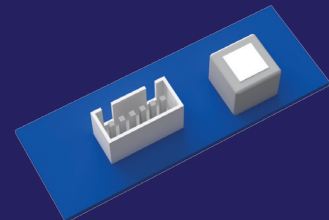
Fire Damper Control Module

The Fire Damper Control Module is a critical accessory designed to enhance the safety of your ventilation system. It integrates with your **SenseAir** unit to automatically control fire dampers in the event of a fire, ensuring that smoke and heat are contained and directed away from living spaces. The module responds to signals from fire alarms or heat detectors, shutting off airflow to specific areas to limit the spread of smoke.



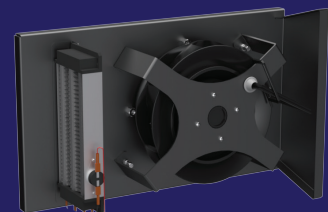
CO2 sensor module

The Internal CO2 Sensor Module continuously monitors carbon dioxide levels in your home, enabling crowd detection and optimizing airflow to maintain a healthier indoor environment. The CO2 Boost automatically adjusts ventilation rates to user-preset levels when elevated CO2 levels are detected. While the CO2 Auto-Mode operates between two preset CO2 thresholds, dynamically adjusting fan speeds to maintain optimal air quality.



Internal Pre-heater Module

The Internal Pre-Heater Module is an essential accessory for **SenseAir** units operating in colder climates, especially in regions with prolonged subzero temperatures. It prevents frost buildup by warming incoming outdoor air before it reaches the heat exchanger. Equipped with a PTC heating element, the pre-heater ensures energy-efficient operation across various weather conditions.



Radon Sensor Module

The Radon Sensor Module is a critical accessory for safeguarding indoor air quality. It continuously monitors radon levels—a naturally occurring, colorless, and odorless gas that can accumulate indoors and pose health risks over time. This module provides real-time feedback and triggers the ventilation system to increase airflow when elevated radon levels are detected, helping reduce exposure and protect your home.



smart solutions for HVAC

Contact Us

info@technogen-hvac.com

Barbaros Mah. Begonya Sk.
Nidakule Batı Ataşehir No:1/2
Ataşehir, İSTANBUL, TURKEY

technogen[®]
smart solutions for HVAC