

# PRODUCT OVERVIEW DECENTRALISED VENTILATION

Ventilation systems with heat recovery



www.inventer.eu

## DECENTRALISED VENTILATION

## FROM INVENTER



#### Decentralised ventilation from inVENTer. Since 1999.

inVENTer ventilation with heat recovery is the most efficient solution for healthy, energy-saving air exchange in your living space. The decentralised ventilation systems automatically bring fresh air into your home by reliably extracting stale air along with its CO<sub>2</sub>, humidity, and toxins, and replacing it with fresh outdoor air.



#### Anti-pollen, anti-dust.

Allergy sufferers can breath easy: The fresh air brought in for ventilation is passed through a filter and purified. A special pollen or fine particulate filter can also be added as an upgrade.



#### Energy-saving ventilation.

The heat recovery feature is a great energy saver for home ventilation. Exhaust air heat is stored temporarily in a ceramic buffer storage component and transferred to the fresh air. This can save you up to 30 per cent on heating costs over the winter.





# SO SIMPLE AND SO SMART

DECENTRALISED RESIDENTIAL VENTILATION



### EXAMPLE: DECENTRALISED VENTILATION SYSTEM DESIGN



Decentralised ventilation device with heat recovery

- Two devices always work together.
- ► The air flow direction of each switches every 70 seconds.



iV-Twin+ single room ventilation

- ► This unit includes two fans running in opposite directions.
- ▶ Particularly well suited for bathrooms and kitchens.

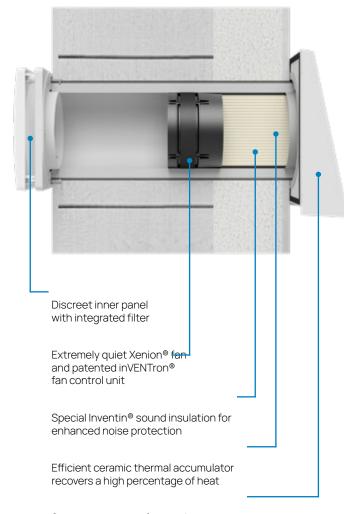


inVENTer Taris exhaust air unit

► For interior rooms Ventilation according to the DIN 18017-3 standard.

### INSTALLATION IN THE OUTER WALL:

 Example: iV14-Zero sound-insulating ventilation device



Secure outer cover for weather protection, available in many RAL colours

### UNDERSTANDING HEAT RECOVERY IN FOUR STEPS

- A pair of fans working together in opposite directions bring fresh air in from outside and remove stale air.
- 2 They switch between intake and extraction every 70 seconds.
- **3** The extracted air flows over the ceramic thermal accumulator, which absorbs the heat and transfers it to the incoming air.
- 4 Up to 94% of the heat can be retained.





Uncomplicated installation in the outer wall



Complies with the DIN 1946-6 standard



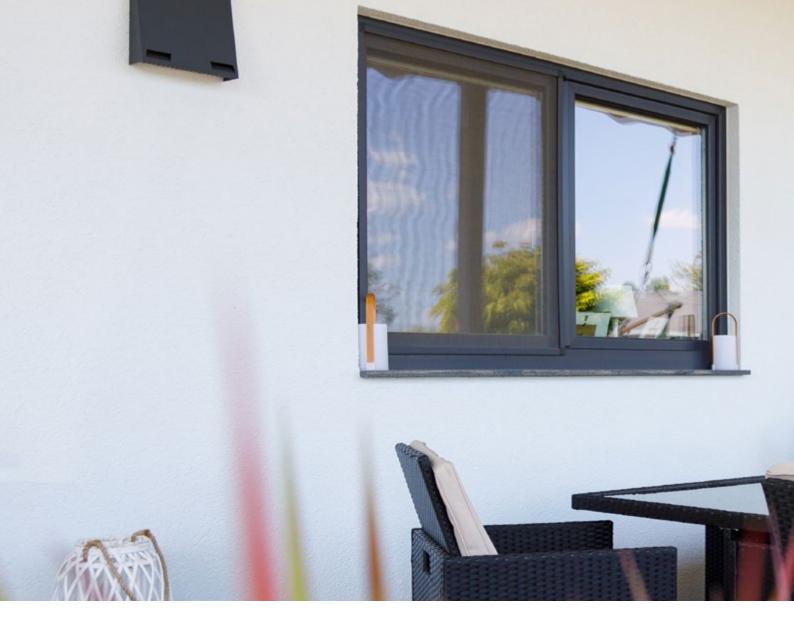
Quick and easy cleaning and maintenance



Energy efficiency: low energy consumption, heat recovery of up to 94%



Suitable for modernisation and new construction



# WE BELONG TOGETHER

DECENTRALISED VENTILATION SYSTEM COMPONENTS



Decentralised ventilation devices

Operated in pairs iV14-Zero sound-insulating ventilation

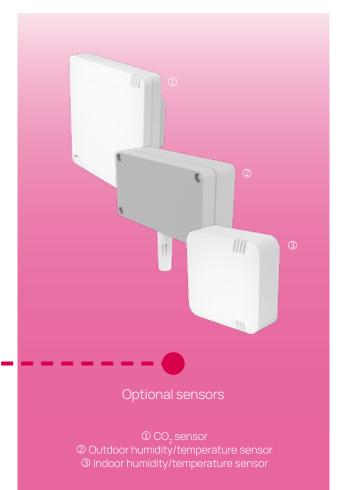


...or single room ventilation

Double fan insert











# EASY TO INSTALL

### MODERNISATION OR NEW CONSTRUCTION: VENTILATION COULDN'T BE EASIER!



#### Easy installation in six steps:

#### 1 Ventilation system planning and device positioning

Your ventilation experts use the building data to determine the necessary amount of air and determine how many ventilation devices are required.

### 2 Sloped wall opening

For new buildings, there are special Simplex wall installation blocks with a prefabricated wall opening and slope. For modernisation projects, a core hole is drilled.

#### 3 Installing the wall mounting sleeve

The sleeve is fixed in place with foam to ensure stable, airtight installation.

#### 4 Installing the ventilation unit

Individual components, such as the heat accumulator and the fan with its control unit, are inserted into the wall mounting sleeve.

#### 5 Attaching the outer and inner covers

The weather protection hood and the inner panel are attached.

#### 6 Connecting the controller

The controller is either wirelessly integrated into the inVENTer Connect system or connected to the ventilation device with a cable.

# SHHH! IS IT EVEN ON?



- Sound protection of up to 60 dB with the Corner version
- Whisper mode with 10 dB(A) thanks to Xenion fan, especially for decentralised ventilation
- Easy installation with Simplex
- Sensors maintain warm, comfortable temperature in the winter
- Pressure stabiliser ensures that the system runs smoothly

# ULTRA QUIET: IV14-ZERO

The inVENTer iV14-Zero is synonymous with sound-insulating ventilation. The patented sound-insulation system with high-performance Inventin<sup>®</sup> insulation reduces external and operating noise to a minimum, with a maximum standard sound level difference of 56 dB (60 dB with the Corner design). The Xenion<sup>®</sup> fan and the inVENTron<sup>®</sup> technology routes air effectively through the ceramic heat accumulator for heat recovery of up to 87%, and the integrated sensors protect the system from winter cold and strong wind. The Simplex wall installation system simplifies installation in new buildings.

## TECHNICAL DETAILS

8.5 - 29
17 – 58
87
1 – 3
0.15
10 – 31
48 - 60
Ø 225
-20 - 50
A+ / A

### ACCESSORIES

- Pollen filter, activated carbon filter
- Windbreak
- Increased sound protection
- Sensors (air quality, humidity/temperature)



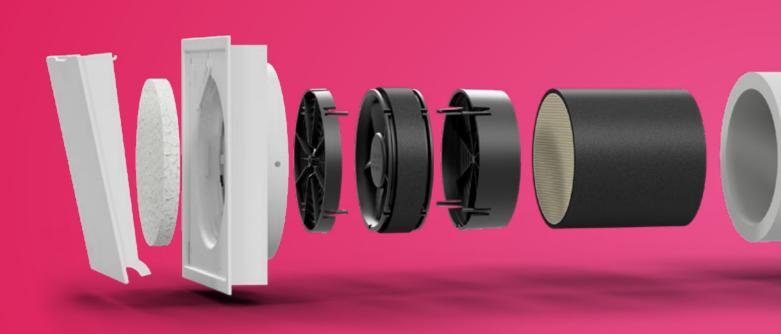


- Discreet outer cover in the window reveal
- Integrated into facade insulation
- Standard sound level difference up to 60 dB



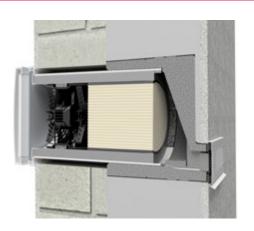
# DISCREET, DECENTRALISED VENTILATIC

Flush with the wall and discreet for clean interior design Clean indoor air thanks to filters Powerful, quiet Xenion® reversible fan Ceramic heat accumulator for more efficient ventilation



### IV14-ZERO NORDIC CONNECT

Discover the iV14-Zero Nordic Connect! This smart decentralised ventilation system makes everything easier – from customisable planning to fast installation. Don't worry about outer covers or inner panels: this system will blend perfectly into your living space. Wireless control with inVENTer Connect combined with exceptional sound protection gives you a healthy home and effective, automatic moisture protection. Sensors automatically adjust air volume. At 87% heat recovery, the iV14-Zero is also an energy-saving champ.



Nordic installed in external insulation

## N.

Extremely quiet thanks to patented Inventin® sound insulation Nordic with integrated slope and passage through the facade Flush, slim-line ventilation grille in the colour of your choice



### TECHNICAL DETAILS

Air volume flow (heat recovery) [m³/h]	8.5 – 29
Air volume flow (exhaust air) [m³/h]	17 – 58
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	10 – 31
Standard sound level difference [dB]	49 - 55
Power consumption [W]	1 – 3
Wall opening [mm]	Ø 225
Energy efficiency class	A+ / A

### VIRTUAL TOUR!



Experience the discreet decentralised inVENTer ventilation system in its natural environment: at home!

With new perspectives and exciting details!

inventer.de/virtueller-rundgang

# RICH VARIETY: THE IV-SMART+



### ELEGANT IN THE WINDOW REVEAL IV-SMART+ CORNER

- Hand-held drilling at just 180 mm
- Powerful pair at 58 m³/h
- Integrated sensors counteract wind pressure and winter cold



Variety of accessories: sound protection, pollen filter, activated carbon filter, air quality sensor

- Discreet air outlet in the window reveal
- Integrated into facade insulation, outer grille in the colour of your choice

 Effective sound protection of up to 60 dB



## DISCREET ON THE FACADE

## FOR CELLARS AND BASEMENTS

## ATTIC VENTILATION IV-SMART+ TOP

- Discreet grille in standard brick size for brick buildings and external insulation systems
- Nordplex version with pre-installed wall mounting sleeve and slope
  - Available RAL colours: white (RAL9016), copper-brown (RAL8004), grey (RAL9006), charcoal (RAL7016)
- Installation below ground level: with riser pipe
- For basement apartments and cellars
- Ventilation with dew point control with the wireless inVENTer Connect controller
- Attic ventilation
- Installation in the jamb wall, air outlet above the roof
- Outer cover adapted to roof design

# IV-SMART+ TECHNICAL DATA

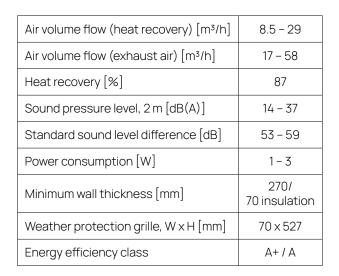
### IV-SMART+



Air volume flow (heat recovery) [m³/h]	8.5 - 29
Air volume flow (exhaust air) [m³/h]	17 – 58
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	14 – 37
Standard sound level difference [dB]	38 - 49
Power consumption [W]	1 – 3
Minimum wall thickness [mm]	270
Weather protection hood, W x H [mm]	279 x 313
Energy efficiency class	A+ / A

### IV-SMART+ CORNER





IV-SMART+ NORDIC

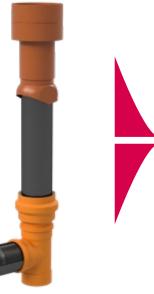


Air volume flow (heat recovery) [m³/h]	8.5 - 29
Air volume flow (exhaust air) [m³/h]	17 – 58
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	14 – 37
Standard sound level difference [dB]	42 - 51
Power consumption [W]	1 – 3
Minimum wall thickness [mm]	250
Weather protection grille, W x H [mm]	280 x 86
Energy efficiency class	A+ / A



Air volume flow (heat recovery) [m³/h]	8.5 - 29
Air volume flow (exhaust air) [m³/h]	17 – 58
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	14 – 37
Power consumption [W]	1 – 3
Minimum wall thickness [mm]	270
External cover [mm]	Ø 159 x H 880
Energy efficiency class	A+ / A

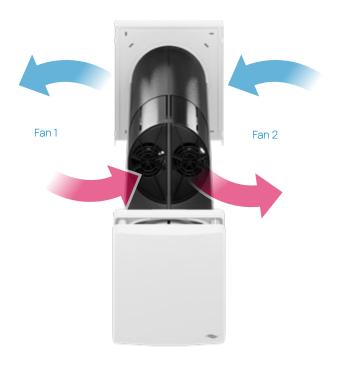
IV-SMART+ TOP



Air volume flow (heat recovery) [m³/h]	8.5 - 29
Air volume flow (exhaust air) [m³/h]	17 – 58
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	14 – 37
Standard sound level difference [dB]	41 - 45
Power consumption [W]	1 – 3
Minimum wall thickness [mm]	270
External cover [mm]	Ø265×H380
Energy efficiency class	A+ / A



# BEST SINGLE ROOM DEVICE: TWIN+



Air supply and exhaust in one device: the iV-Twin+ is ideal for ventilating single rooms. Two fans in one device create opposing air flows, and a vertical divider separates them effectively – so there is no need to operate two devices as a pair.

One of the largest ceramic thermal accumulators on the market gives the iV-Twin+ exceptional heat recovery (up to 94%).

This is a great option for moist rooms such as bathrooms, kitchens, and laundry rooms.

### 3-IN-1 BATHROOM SET: FAN, CONTROLLER, HYGROSTAT!



- Your bathroom ventilation set: iV-Twin+ with heat recovery, sMove s4 touch-and-slide controller, HYG18 hygrostat with digital display
- Also available in the Nordic version with a discreet exterior grille
- Quick installation in new buildings with the Simplex wall installation system: pre-installed wall mounting sleeve including slope

### TECHNICAL DETAILS

Air volume flow (heat recovery) [m³/h]	5 - 23
Air volume flow (exhaust air) [m³/h]	10 – 45
Heat recovery [%]	94
Sound pressure level, 2 m [dB(A)]	14 – 38
Standard sound level difference [dB]	45 - 56
Power consumption [W]	0.5 – 3
Energy efficiency class	A+ / A



Scan here for more information and downloads for the iV-Twin+ at www.inventer.eu

# WORKING IN THE FRESH AIR

## WITH THE POWER-BOOSTED IV-OFFICE



Maximum power, minimum noise – this is ventilation with the iV-Office. The Xenion® high-speed EFP fan provides healthy air exchange in offices, daycare facilities, and more.

Thanks to the special Inventin<sup>®</sup> insulation, the device creates a quiet, relaxed "fresh-air" working environment starting at 12 dB(A) of noise emissions and with up to 55 dB of sound protection. The high exhaust airflow rate (up to 90 m<sup>3</sup>/h) makes the iV-Office perfect for large-room ventilation. The integrated heat accumulator also provides heat recovery of up to 88%.

### EVERYTHING INCLUDED: 4-IN-1 OFFICE SET



- Your decentralised office ventilation set
- Two iV-Office units with powerful Xenion<sup>®</sup> EFP fans for outer-wall installation
- sMove s8 touch-and-slide controller for manual air volume flow customisation
- CS1 CO<sub>2</sub> sensor for automatic ventilation when you need it

### TECHNICAL DETAILS

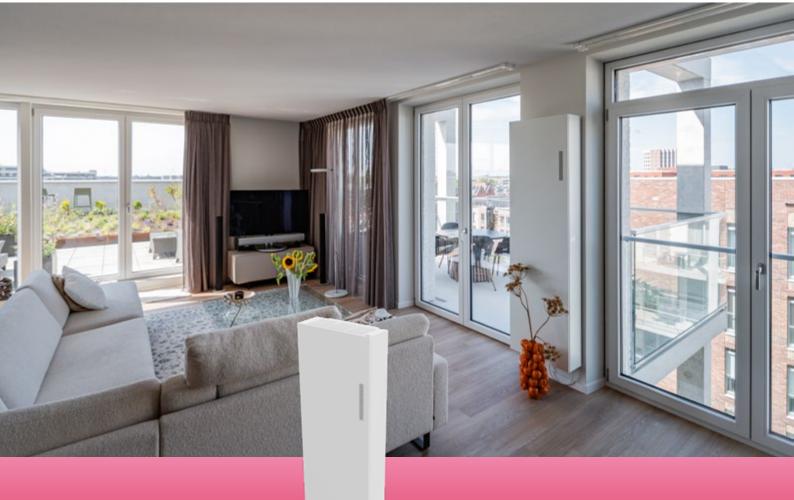
Air volume flow (heat recovery) [m³/h]	10 - 45
Air volume flow (exhaust air) [m³/h]	20 - 90
Heat recovery [%]	88
Sound pressure level, 2 m [dB(A)]	12 - 37
Standard sound level difference [dB]	49 - 55
Power consumption [W]	1-5
Energy efficiency class	A+ / A



Scan here for more information and downloads for the iV-Office at www.inventer.eu



# FOR SPECIAL REQUIREMENTS



# SINGLE-ROOM VENTILATION

- Installation in the outer wall with only two drilled core holes
- Air volume flow of up to 180 m<sup>3</sup>/h
- Automatic mode with integrated sensors for detecting relative humidity and indoor air quality
- Uncomplicated connection to a 230 V socket
- Ideal for facades subjected to high noise levels

### TECHNICAL DETAILS

Air volume flow (heat recovery) [m³/h]	50 - 180
Heat recovery [%]	87
Sound pressure level, 2 m [dB(A)]	12 - 32
Power consumption, max. [W]	33.4
Mains voltage [V AC], [Hz]	230, 50
Standby consumption [W]	<1
Energy efficiency class	А



# CENTRAL RESIDENTIAL VENTILATION



- Installation in the exhaust air area
- Up to two additional rooms can be connected
- Suitable for student housing, care homes, and hotels
- Air volume flow is automatically calibrated during commissioning
- Enhanced noise protection

### TECHNICAL DETAILS

Air volume flow (heat recovery) [m³/h]	30 - 78
Heat recovery [%]	Ø 77, max. 80
Sound pressure level (heat recovery) [dB(A)]	19 – 29
Power consumption [W]	3.5 - 25
Electrical preheating radiator [W]	max. 375
Mains voltage [V AC], [Hz]	230, 50
Energy efficiency class	А

## ENERGY-SAVING MODERNISATION



In February 2022, the housing association in Stadtroda, Germany commissioned a plan for ecologically, sustainably, and economically modernising a block of flats – a typical example of a multi-storey residential building.

A residential ventilation plan with heat recovery was prepared for this pilot project. The flats are equipped to allow controlled ventilation as required by the DIN 1946-6 standard.

### VENTILATION DEVICES USED

Depending on flat size:

- 4 to 6 iV14-Zero Connect ventilation devices with heat recovery
- 1 Taris exhaust air unit for each interior bathroom and kitchen

### PROJECT DATA

### Stadtroda, Germany I Energy-saving modernisation of 144 flats

Project: WBS 70-type concrete residential building, Stadtroda, Germany Upgrades: Decentralised ventilation with heat recovery Grey water heat recovery Solar panels (roof system and balcony modules) Balcony glazing Funding: Federal Office for Economic Affairs and Export Control Total CO<sub>2</sub> reduction (technology): 85.6 tonnes per year

Project manager: IBA GmbH Jena









## ECO-FRIENDLY CONSTRUCTION



In the middle of the Wiesbaden city centre, at a premium location in the Komponistenviertel neighbourhood, this climate-neutral multi-family house was built to meet the KfW 40+ efficient housing standard. The comprehensive energy consultation included recommendations for the appropriate technical equipment and planning for the future. These measures attracted a large amount of funding and a considerable repayment grant from the public KfW Bank Group.

### VENTILATION DEVICES USED

• iV14-Zero sound-insulating ventilation with heat recovery

## PROJECT DATA

## Wiesbaden, Germany I Multi-family house with funding from the KfW Bank Group

Contractor: Bing72 Projekt GmbH & Co. KG Energy consultation, ventilation planning as required by the DIN 1946-6 standard: Joachim Schrader, Bauen+Energie Primary energy demand: 3.7 kWh/m²/year CO<sub>2</sub> reduction from the reference building: 85%

Amount of public funding: €300,000 with a repayment grant of €45,000

Energy standard: KfW Efficiency House 40+



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As product suppliers in the UK and Ireland, we're happy to assist you with your projects and have expert technical and sales advice on hand.



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