# Lo-Carbon Sentinel Econiq-Cool (KERS)

- Additional controls for communication with KERS Coolboost Heat Pump
- Combined cooling of up to 1.45kW
- Best in class SFP's and thermal efficiencies up to 93%
- Approved Document F aligned commissioning wizard
- New Sentinel-X wireless control platform
- Intelligent smart app control as standard
- Horizontal duct option for space-saving installations (L only)
- ISO ePM10 (M5) and ePM2.5 (F7) filtration options
- Sound levels as low as 15.5 dB(A) breakout
  independently tested and verified by SRL
- Left/right handing via controls
- Developed and manufactured in the UK

Vent-Axia Econio

The Lo-Carbon Sentinel Econiq-Cool is Vent-Axia's latest flagship mechanical ventilation with heat recovery system with all new controls allowing communication with the KERS Coolboost Heat Pump.

The unit incorporates a fully automatic 100% summer bypass damper which monitors internal and external temperatures to maintain the user comfort temperature (default 25°C)

If the MVHR can't provide a lower temperature air from outside to negate the comfort temperature being above the set temperature, it will send a signal to the KERS Coolboost to request cooling.

This will then combine the air flow from the MVHR and KERS Coolboost Heat Pump via built in dampers from the KERS system.

All cooling is managed by the KERS Coolboost Heat Pump.

Designed and developed in the UK, it offers the highest level of comfort and functionality all year round.

Introducing a full range of products, with air performance suitable for all types of homes, the new Sentinel-X wireless controls platform delivers complete control over the home environment, provided through a full range of wired/wireless sensors and a smartphone app.

## A Whole New Experience

The highly sculpted interior surfaces, designed using the latest CFD techniques, ensure airflows are maximised through the unit, minimising noise and energy use. This feature alone provides an experience, that will delight homeowners, providing the most discrete and highly efficient ventilation available.

## Air Quality and Health

The MVHR filter options offer numerous benefits, including improved indoor air quality by removing allergens and particulate matter. They maintain the system's energy efficiency, reduce heating and cooling costs, and enhance the overall longevity of the system. Additionally, they capture bacteria, viruses and VOCs, promoting a healthier living environment. Regular filter maintenance extends the system's lifespan and ensures uninterrupted operation.

Whatever the outside environment, the system can help improve the indoor air quality by filtering out impurities, with ISO 60% Coarse (G4) supplied as standard, which can filter out sand, fine hair and particles larger than 10 $\mu$ m. Additional filtration can be achieved with a selection of optional filters, such as ISO ePM10 (M5), which can filter pollen, stone dust and particles smaller or equal to 10 $\mu$ m and ISO ePM2.5 (F7), which can filter out mould spores, bacteria and particles smaller or equal to 2.5 $\mu$ m.

The various sensor options allow for flexible installation in individual rooms, supporting effective management of the air in the home. For example, a  $\rm CO_2$  sensor located within a habitable room helps ensure a healthy and safe working environment.  $\rm CO_2$  levels managed at less than 1000ppm help promote cognitive function. A humidity sensor located in the bathroom detects high levels of moisture can support good indoor air quality.

## Low Noise Levels

The Lo-Carbon Sentinel Econiq-Cool is one of the quietest systems on the market, with a noise level as low as 15.5 dB(A). The range is designed with an integral acoustic enclosure, made of steel, foam and expanded polypropylene (EPP), minimising breakout noise. The highly efficient motors are mounted on anti-vibration mounts to ensure minimal vibration

## Integral Humidity Sensor

The integral humidity sensor increases speed in proportion to relative humidity levels, saving energy and reducing noise. The sensor also reacts to small but rapid increases in humidity, even if the normal trigger threshold is not reached. This unique feature ensures adequate ventilation, even for the smallest wet room. The nighttime relative humidity setback feature suppresses nuisance tripping as humidity gradually increases with falling temperatures.



## Demand Control Ventilation

The Vent-Axia Connect smartphone application allows a multitude of functions to be adjusted from the comfort of the sofa, available on iOS and Android.

With smartphone-compatible controls, the homeowner is in full control of their ventilation all year round. They have the flexibility to increase the ventilation rate during hot periods in the summer or reducing the speed to minimise running costs while away.



The Sentinel control logic built within the MVHR ensures the system operates optimally with automated functions such as frost protection and summer bypass, providing comfort in the home.



# Airtight Buildings

Low-energy buildings typically have very low leakage rates (below  $3m^3/(h.m^2)$  at 50Pa). This reduces the effectiveness of the standard frost protection strategy which imbalances the airflows.

# Spigot Options (Lonly)

The inclusion of horizontal spigots allows for flexible installation in tight spaces. It is possible to use both vertical and horizontal connections.

Model Description Sentinel Econiq-Cool S Sentinel Econiq-Cool L	Stock Ref 412380 413775
Accessories Description Acoustic Purge Fan Acoustic Purge Fan XL Wall Mounting Kit for Controller Econiq S Acoustic Solution Enclosure Kit Econiq S Acoustic Solution Top Box Kit Econiq S Acoustic Solution Top Box & Enclosure Kit Econiq M & L Floor Stand	Stock Ref 477988 479829 411628 414012 414013 414014 414122
Spare Filters Sentinel Econig-Cool S	
Description	Stock Ref
ISO 60% Coarse (G4) Filter 2 per Pack	411689
ISO ePM10 50% (M5) Filter 1 per Pack ISO ePM2.5 70% (F7) Filter 1 per Pack	472669 472671
Sentinel Econiq-Cool L Description ISO 60% Coarse (G4) Filter 2 per Pack ISO ePM10 50% (M5) Filter 1 per Pack ISO ePM2.5 70% (F7) Filter 1 per Pack	Stock Ref 411690 411691 411692

#### Sensor Overview

								4	
				AIM				Speed	
Power	Colour	CO <sub>2</sub>	PIR	Alarm	Temp.	Humidity	Wireless	Switch	Stock Ref
Battery	White				$\checkmark$	$\checkmark$	$\checkmark$		496431
Battery	White				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	496437
Battery	Black				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	497689
0-10V	White	$\checkmark$			$\checkmark$	$\checkmark$			496432
240V	White				$\checkmark$	$\checkmark$	$\checkmark$		496429
240V	White	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		496433
240V	White		$\checkmark$				$\checkmark$		496438
240V	White				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	496620
240V	Black				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	497693
240V	White				$\checkmark$	$\checkmark$		$\checkmark$	496621
240V	Black				$\checkmark$	$\checkmark$		$\checkmark$	497697

#### SEC Class

Model	SEC Class				
Sentinel Econiq-Cool S	A+				
Sentinel Econiq-Cool L	A+				

## SAP PCDB Test Results

#### Econiq-Cool S

	Thermal Efficiency %	SFP (W/l/s)
K+1	93	0.39
K+2	92	0.46
K+3	91	0.55
K+4	91	0.70
K+5	90	0.85
K+6	89	1.07
K+7	89	1.31

#### Econiq-Cool L

	Thermal Efficiency %	SFP (W/l/s)
K+1	93	0.56
K+2	93	0.53
K+3	93	0.56
K+4	92	0.62
K+5	91	0.72
K+6	91	0.84
K+7	90	1.01

	Sentinel Econiq-Cool	Sentinel Econiq-Cool L
Recommended max system flow (I/s) @ Pressure (Pa)	97 @ 150	167 @ 150
Acoustic Enclosure	0	Χ
Acoustic Top Box	0	Х
Part F Compliant App Commissioning Certificate	✓	✓
RF858 connectivity, 802.11b/g/n Wi-Fi and Bluetooth low energy 4.2	$\checkmark$	$\checkmark$
Spigot Options Vertical - Horizontal	Vertical	Vertical & Horizontal
Spigot size 125mm or 200mm	125	200
Left/Right Hand Orientation Through Control	$\checkmark$	✓
Fully automatic 100% summer bypass	$\checkmark$	$\checkmark$
Active Frost Protection to -20°C	$\checkmark$	$\checkmark$
Fault Code Indicator	$\checkmark$	$\checkmark$
Easy Access Filters: ISO Coarse 65% (G4)	$\checkmark$	$\checkmark$
Easy Access Filters: ISO ePM10 50% (M5)	0	0
Easy Access Filters: ISO ePM2.5 70% (F7)	0	0
Clean Filter Indicator (Time frame)	$\checkmark$	$\checkmark$
PIN Number Lock	$\checkmark$	$\checkmark$
Running Time Indicator	$\checkmark$	$\checkmark$
Enthalpy Heat Exchanger	0	0
Soft-Start Boost	$\checkmark$	$\checkmark$
Delay-On	$\checkmark$	✓
Number of controllable speeds	4	4
Installer function to copy/load unit setup	$\checkmark$	✓
Inputs 2 x 0-10V; 2 x LS; 5 x Volt-Free	$\checkmark$	$\checkmark$
Integral Humidistat	$\checkmark$	$\checkmark$
Relay outputs - For example control heaters or geothermal heat exchanger	0	0
BMS - modbus supported over RS485	$\checkmark$	$\checkmark$
Operating ambient temperature (°C)	-20 to +40	-20 to +40
Operating Humidity (%RH)	0 to 95	0 to 95
Mounting	Wall or Floor	Wall or Floor
Maintenance access	From Front	From Front

O - Denote Optional



#### Consultant's Specification

#### Specification

The Mechanical Ventilation Heat Recovery Unit shall be the Lo-Carbon Sentinel Econiq-Cool as manufactured by Vent-Axia. It should be sized as indicated on the drawings and shall be in accordance with the particular specification.

The unit shall be fully insulated for thermal and acoustic performance and shall incorporate a high-efficiency composite plastic counter-flow heat exchanger with an independently verified thermal efficiency of up to 93% when tested to EN 308.

The heat exchanger shall be protected by ISO 60% Coarse (G4) grade filters on extract and supply with the facility to accommodate ePM2.5 (F7) and ISO ePM10 (M5), or an inline filter such as the Vent-Axia Pure Air Carbon Filter. The built-in filters shall be accessible via tool-free access doors. The heat exchanger, motors, summer bypass and all other serviceable parts shall be accessible through the front of the unit.

The Lo-Carbon Sentinel Econiq-Cool shall automatically vary the ventilation rate via EC/DC motors, as it receives signals from optional or in-built sensor inputs. When a signal is received, the fans shall either vary their speed proportionally or on a normal/boost principle. The unit shall have the facility to commission the supply and extract fans individually via in-built minimum and maximum speed adjustment, alternative wired remote-control unit or via a compatible smartphone using the Vent-Axia Connect application. The fans themselves shall have independent, infinitely variable speed control.

The MVHR unit shall be manufactured with an ABS Outer case construction and an Expanded Polystyrene (EPS) inner chassis with custom motor and impeller mounting features. The inner chassis will assist in reducing noise and act as a large anti-vibration mount avoiding transmission through to the back mounting plate or the base of the unit. The MVHR unit shall be tested to ensure it meets the maximum allowable vibration of no more than 1mm/s, measured on the unit wall fixing points. The unit shall have a fully automatic 100% summer bypass, integral minimum and maximum infinitely variable speed controls with fascia mounted failure indication. The unit shall have low-energy, high efficiency EC/DC fan/motor assemblies with sealed for life bearings. The impellers shall be high-efficiency backward curved centrifugal type, achieving an SFP as low as 0.38W/I/s (EN 308).

The unit shall have two condensate drain outlets for handing to be defined onsite and during commissioning. The unit shall have wireless control capability options, using RF868 connectivity, 802.11b/g/n Wi-Fi and Bluetooth low energy 4.2. The unit shall use RF868 to connect to a wide ecosystem of wireless sensors including but not limited to  $CO_{2^{\prime}}$  temperature, and relative humidity. The unit shall be able to engage Wi-Fi to connect to local devices and create a local area network to allow for a larger network to be created for commissioning. The unit shall have Bluetooth low energy 4.2 to allow connectivity onto compatible smartphone devices. The unit shall be constructed with a removable tool free front panel which gives access to the removable on-board controller and other accessories. The EPS panel can then be removed with 4 screws allowing full maintenance access. This shall provide access to the following:

- ✓ Supply or extract fan
- ✓ Heat exchanger
- ✓ Access to the electrical connections

Access shall be provided for wiring termination and setup/commissioning. The unit can be supplied with either a backlit user interface or a blank plate, both of which shall be removable for remote mounting if required. Filters shall be accessed via the two filter drawers found near the top of the unit, the S shall have filter drawers and the M and L shall have filter caps.

Units shall be manufactured by Vent-Axia Ltd.

#### Standard Controls

The Lo-Carbon Sentinel Econiq-Cool shall incorporate the following functions through a user interface fitted by the manufacturer or a paired smartphone with the Vent-Axia Connect application:

- ✓ Integral infinitely variable fan speed control on supply and extract.
- ✓ 6 speeds; 4 adjustable
- Left or Right hand spigot configuration, programmable during commissioning
- $\checkmark$  Tool free filter access
- ✓ Integral BMS interfaces control and status indication
- ✓ Heating interlocks
- ✓ 24V external sensor supply, eg PIR sensor
- ✓ 0-10V proportional speed adjustment
- ✓ Volt free contacts
- $\checkmark\,$  Fully automatic summer bypass
- ✓ Filter check facility
- ✓ Control panel PIN number lock

The unit shall incorporate:

- ✓ An integral humidity sensor with the following features: Ambient Response; Raises the humidity trigger point as dwelling temperature reduces.
- Rapid Response: Monitors the rate of change in humidity and triggers increased airflow even if the humidity trigger threshold is not reached.
- Proportional Response; incrementally increases the fan speed to reduce noise and reduce energy consumption.
- RS485 connectivity Long distance cabling to support multiple sensor connections.
- RF868 connectivity Radio reference 868 MHZ for multiple wireless sensors pairing Bluetooth low energy 4.2 - Enable pairing within compatible smartphone device
- ✓ 802.11b/g/n Wi-Fi Enable localised access point or connect to the local area network using the Vent-Axia Connect application, via a compatible smartphone device
- ✓ The unit shall incorporate an automatic 100% summer bypass damper which monitors internal and external temperatures to maintain the user comfort temperature (default 25°C): -
  - 'Evening Fresh' turns the unit to maximum speed with the bypass operational for 2 hours or until the user comfort temperature is reached (default 25°C).
  - 'Night Time Fresh' will run the unit at maximum speed with the bypass operational throughout the night or until the dwelling reaches minimum temperature (default 14°C).

The Lo-Carbon Sentinel Econiq-Cool will send a signal to the Kers Coolboost Heat Pump when a temperature reduction is not possible through the MVHR alone to signal the request for Cooling.

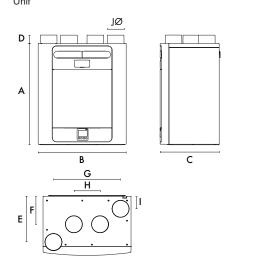
All cooling will be managed by the Kers Coolboost Module.

Independently acoustically tested to BS EN 13141-7:2010.



# Sentinel Econiq S

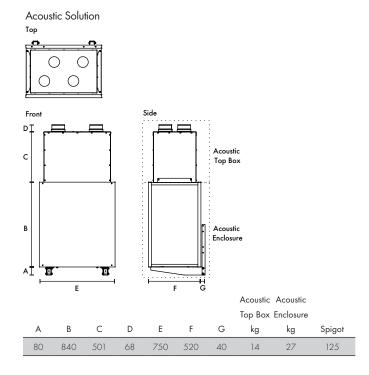
Dimensions (mm) Unit



А	В	С	D	Е	F	G	Н	I	JØ	kg	
760	660	443	63	343	210	503	197	93	125	27	
Packed	Packed weight: 32kg										

## Sound Spectrum (Unit only)

Octave Band (Hz) Sound Power Levels, dB											SPL dB(A)
Speed	Test mode	63	125	250	500	1 k	2k	4k	8k	LwA	@ 3m
	Supply	52.9	50.9	46.8	43.0	34.6	27.1	19.2	25.4	43.9	26.4
20%	Extract	50.3	49.0	36.0	31.5	23.6	16.1	18.9	25.3	36.4	18.9
	Breakout	34.6	34.8	35.7	34.9	29.6	25.1	21.0	25.3	36.0	15.5
	Supply	59.5	56.5	59.4	55.0	48.2	42.6	31.8	26.1	55.9	38.4
40%	Extract	51.9	51.3	50.4	41.2	35.0	25.3	19.8	25.4	44.8	27.3
	Breakout	40.2	42.6	46.5	45.4	41.0	36.2	25.5	25.3	46.5	26.0
	Supply	66.9	62.4	63.3	62.0	57.9	53.5	43.4	34.2	63.2	45.7
60%	Extract	60.6	60.3	54.2	49.5	44.4	36.2	27.9	26.3	51.7	34.2
	Breakout	45.5	49.8	52.5	53.1	49.7	46.7	36.2	26.9	54.5	34.0
	Supply	82.4	67.6	65.2	67.6	64.2	60.8	50.8	43.2	69.2	51.7
80%	Extract	75.5	68.6	59.3	56.0	48.3	44.2	36.9	31.3	58.6	41.1
	Breakout	59.2	55.0	56.8	60.0	55.4	53.9	44.1	33.4	61.0	40.5
	Supply	79.4	69.6	66.6	75.1	64.9	63.6	53.4	45.7	73.7	56.2
100%	Extract	72.4	70.5	60.5	56.4	49.8	46.3	39.0	33.4	59.5	42.0
	Breakout	63.0	57.1	58.5	63.7	56.8	55.9	46.4	36.2	63.5	43.0

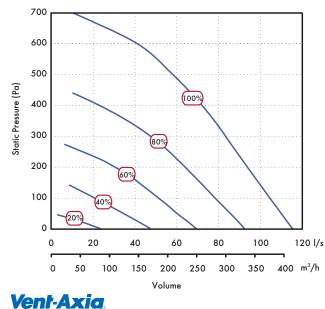


## Sound Spectrum (Solution Top Box & Enclosure Kit)

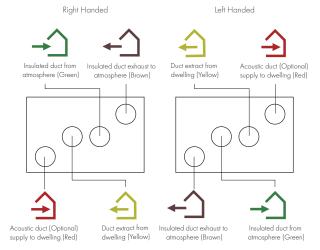
			•								
		(	Octave	Band	(Hz) Sc	ound Pc	wer Le	vels, dE	3		SPL dB(A)
Speed	Test mode	63	125	250	500	1 k	2k	4k	8k	LwA	@ 3m
	Supply	54.7	50.5	41.5	30.8	18.6	14.7	18.2	24.0	38.0	20.5
20%	Extract	54.8	41.7	31.4	20.2	15.2	13.8	18.3	24.3	31.9	14.4
	Breakout	36.6	47.3	38.0	24.7	19.3	16.6	19.1	23.6	34.0	13.5
	Supply	61.0	57.7	56.0	39.0	27.5	16.6	18.4	24.1	48.9	31.4
40%	Extract	55.7	50.8	44.6	26.8	19.1	15.0	18.2	24.0	39.2	21.7
	Breakout	55.9	55.2	48.2	35.5	29.9	20.9	20.4	25.3	42.6	22.1
	Supply	64.5	64.3	56.2	48.6	36.0	22.8	19.0	24.2	52.3	34.8
60%	Extract	59.4	57.3	46.6	36.0	25.6	17.4	18.6	24.5	43.9	26.4
	Breakout	43.5	60.5	49.5	43.5	39.0	32.0	23.8	23.7	47.6	27.1
	Supply	68.9	65.9	59.9	53.9	41.4	29.3	21.6	24.7	55.9	38.4
80%	Extract	63.1	69.3	52.6	43.0	33.4	23.7	20.2	24.6	54.5	37.0
	Breakout	48.3	69.8	52.7	48.3	44.7	39.8	33.2	25.9	57.1	36.6
	Supply	72.5	70.5	63.1	56.1	43.9	33.0	23.7	25.2	59.3	41.8
100%	Extract	70.3	61.9	56.2	45.4	36.6	28.0	22.9	24.6	51.5	34.0
	Breakout	54.3	67.1	63.3	51.3	47.9	43.9	38.5	28.7	57.7	37.2

Tested according to BS EN 13141-7:2010. Breakout quoted spherical. Supply and Extract quoted hemispherical. For in-duct data, end reflections are added based on the spigot size of the unit.

# Performance (Sentinel Econiq S)



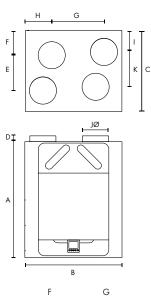
# Spigot Configuration (Sentinel Econiq S)



Hand-able through controller (except if pre-heater fitted)

# Sentinel Econiq-Cool L

# Dimensions (mm)



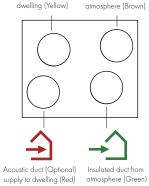
	А	В	С	D	E	F	G	Н	I	JØ	К	kg
	881	728	608	50	261	187	394	200	160	200	261	50
Pac	Packed weight: 55kg											

# Sound Spectrum

	Octave Band (Hz) Sound Power Levels, dB									
Speed	Test mode	63	125	250	500	1 k	2k	4k	8k	SPL dB(A) @ 3m
	Breakout	41	41	51	47	40	18	19	23	26
20%	Inlet	50	43	42	38	31	16	18	23	21
	Outlet	57	56	53	47	40	29	19	24	31
	Breakout	41	44	53	52	43	32	20	23	31
40%	Inlet	60	48	50	38	37	26	19	23	27
	Outlet	68	62	62	56	55	49	33	24	42
	Breakout	44	50	55	56	48	42	27	23	34
60%	Inlet	63	54	59	44	43	37	24	23	35
	Outlet	71	67	67	62	62	59	46	34	49
	Breakout	55	54	54	60	52	47	36	24	38
80%	Inlet	69	60	55	50	48	43	33	24	36
	Outlet	78	72	66	70	67	65	56	44	54
	Breakout	67	67	58	72	58	50	42	27	50
100%	Inlet	81	64	58	57	51	47	39	27	42
	Outlet	91	76	69	74	70	69	62	50	58

# Spigot Configuration



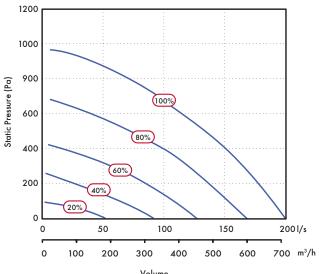


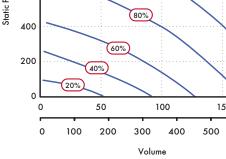
Insulated duct from Acoustic duct (Optional) atmosphere (Green) supply to dwelling (Red)

Insulated duct exhaust to atmosphere (Brown) Duct extract from dwelling (Yellow)

Left Handed

## Performance







# Sentinel-X Controllers

# Battery Controllers & Sensors



#### Battery - Internal Temperature and Humidity - Wireless

Room mounted humidity and temperature sensor for wired or wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency), or RS485 (Wired connection) communication method whilst being powered by batteries.

- Dimensions (HxWxD) (mm) 60 x 60 x 22
- 2 x AAA Batteries included
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- Wireless range 20m closed/100m open
- RF 868MHz Wireless or RS485 Wired communication
- Status LED indicator for pairing, health check and fault conditions
- Mounted using provided back plate

# Stock Ref 496431



#### **Battery - 4 Speed Switch with Temperature and Humidity - Wireless** Room mounted Speed Switch for wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency) communication whilst being powered by batteries.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- 2 x AAA Batteries included
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- Wireless range 20m closed/100m open
- RF 868MHz Wireless
- Mounted using provided back plate or compatible with a standard single gang or surface mounted pattress box

• Status LED indicator for pairing, health check and fault conditions

Model	Stock Ref
White	496437
Black	497689

# HMI Kit



Wall-mounted HMI Kit to suit Econiq models with full HMI Includes HMI Blank controller, HMI backplate and cable.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- Power supply 240V
- Wireless range 20m closed/100m open
- RF 868MHz Wireless or RS485 Wired communication
- Compatible with standard single gang or surface mounted pattress box

# Stock Ref

#### 411628

# 24V Sensor



#### 0-10V CO<sub>2</sub>, Temperature and Humidity - Wired

Room mounted  $\rm{CO}_2$  sensor with 0-10V signal output powered by an external 24V supply.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- 24V Power supply required
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- CO<sub>2</sub> range 0-2000PPM
- Compatible with standard single gang or surface mounted pattress box
- Status LED indicator for pairing, health check, faults & air quality traffic light index
- O-10V Wired Communication

Stock Ref 496432



# Sentinel-X Controllers

# 240V Controllers & Sensors



#### 240V - Internal Temperature and Humidity -Wireless

Room mounted humidity and temperature sensor for wired or wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency), or RS485 (Wired connection) communication method whilst being powered by a local 240V supply.

- Dimensions (HxWxD) (mm) 90 x 90 x 17 •
- Power supply 240V
- Temperature range 0~60°C
- Relative humidity range 0-90% RH •
- Wireless range 20m closed/100m open
- RF 868MHz Wireless or RS485 Wired communication
- Compatible with standard single gang or surface mounted pattress box
- Status LED indicator for pairing, health check, faults & air quality traffic light index

#### Stock Ref 496429



#### 240V - 4 Speed Switch with Temperature and Humidity - Wireless

Room mounted Speed Switch for wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency) communication whilst being powered by a local 240V supply.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- Power Supply 240V
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- Wireless range 20m closed/100m open
- RF 868MHz Wireless
- Mounted using provided back plate or compatible with standard single gang or surface mounted pattress box
- Status LED indicator for pairing, health check and fault conditions

Model	Stock Ref
White	496620
Black	497693



#### 240V - CO<sub>2</sub>, Temperature and Humidity -Wireless

Room mounted CO<sub>2</sub> sensor for wired or wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency), or RS485 (Wired connection) communication method whilst being powered by a local 240V supply.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- Power supply 240V
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- CO, Range 0-2000 PPM
- Wireless range 20m closed/100m open
- RF 868MHz Wireless or RS485 Wired communication
- Compatible with standard single gang or surface mounted pattress box
- Status LED indicator for pairing, health check, faults & air quality traffic light index Stock Ref

# 496433



#### 240V - PIR Sensor - Wireless

Room mounted PIR sensor for wired or wireless communication with a compatible system. Using an in-built RF 868 MHz (Wireless radio frequency), or RS485 (Wired connection) communication method whilst being powered by a local 240V supply. Room mounted presence detector for min/max or on/off control. Wall or ceiling mounting.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- Power supply 240V
- 5-25min run on timer
- PIR Range 3m
- Compatible with standard single gang or surface mounted pattress box
- Wireless range 20m closed/100m open
- RF 868MHz Wireless or RS485 Wired communication

# Stock Ref

496438



#### 240V - 4 Speed Switch with Temperature and Humidity - Wired

Room mounted Speed Switch for wired communication with a compatible system. Using an in-built RS485 communication method powered by a local 240V supply.

- Dimensions (HxWxD) (mm) 90 x 90 x 17
- Power Supply 240V
- Temperature range 0~60°C
- Relative humidity range 0-90% RH
- Mounted using provided back plate or compatible with standard single gang or surface mounted pattress box
- Status LED indicator for pairing, health check and fault conditions
- RS485 Wired Connection

Model	Stock Ref
White	496621
Black	497697

