# The DRIMASTER*ECO* Range

The DRIMASTER-ECO range provides whole home ventilation using the Positive Input Ventilation principle, which introduces fresh filtered air into the dwelling at a continuous rate, encouraging movement of air from inside to outside. To achieve this the unit is mounted in the loft space, drawing air through the filters and inputting it, at ceiling level, into the property. The DRIMASTER-ECO units are fitted with an internal temperature sensor, which continuously monitors the temperature in the loft and boosts the air volume when the loft temperature is above a set level (heat recovery mode). If the loft temperature becomes excessive, the unit will switch to standby mode (no airflow). Once installed, the airflow can be set to suit the house size and if required, the way it responds to the temperature changes within.

# DRI-ECO-HC

The DRI-ECO-HC enhances Nuaire's PIV technology with the added benefit of having the system controls located in the contemporary ceiling diffuser. This unique feature offers the homeowner complete control of the unit, without having to enter the loft space. Not only can settings be altered with the push of a button on the contemporary diffuser, but there is also a 7 segment display which notifies the user of the need for filter change and what setting the DRIMASTER-ECO is running on.

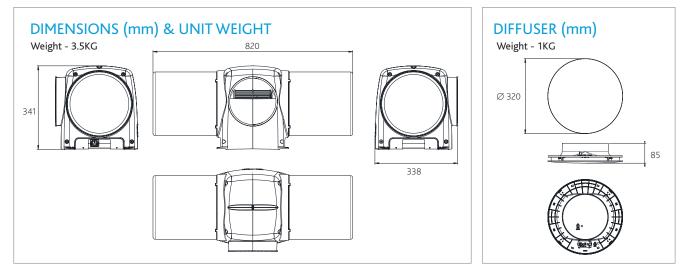




DRI-ECO-HC INSTALLATION



# Technical



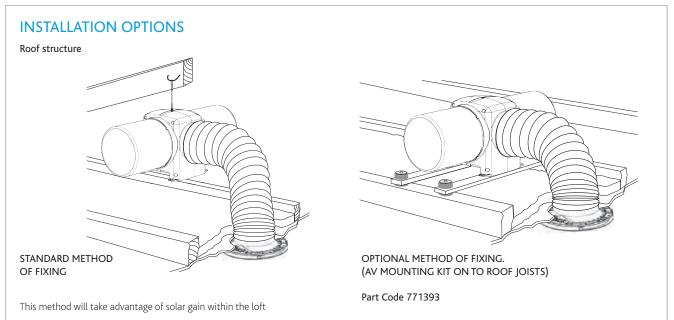
# Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.

# **Electrical Details**

	Voltage	Consumption
DRI-ECO-HC	230V 1ph 50Hz	1.6W(min) 17W(max)

# Typical Installation



# DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC sees Nuaire offer its long-standing PIV technology alongside wireless control and sensor capabilities.

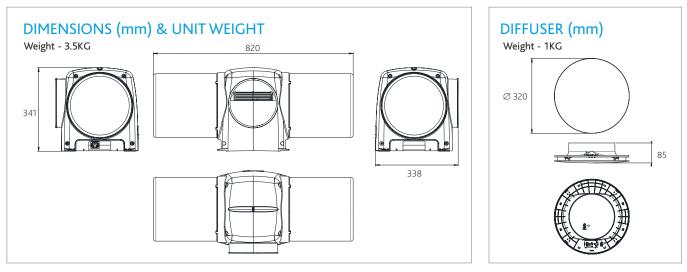
By offering a choice of interactive sensors Nuaire has created an adaptable, market-leading PIV product. Homeowners can choose to use one or all of the sensors available for optimum system performance, in addition to the unique controls sited at our re-designed, modern ceiling diffuser.





DRI-ECO-LINK-HC INSTALLATION

### Technical



# Wiring

The unit is supplied with a pre-wired power supply. This power supply unit has a metal bracket incorporating fixing holes, which should be used to fit the power supply to a suitable surface e.g. a wooden joist. The fan unit is also supplied with a fused spur. The 2 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.

8



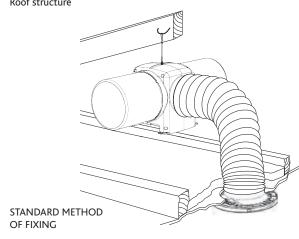
# **Electrical Details**

	Voltage	Consumption
DRI-ECO-LINK-HC	230V 1ph 50Hz	1.6W(min) 17W(max)

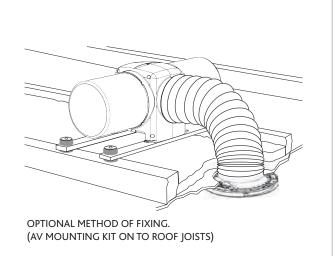
# **Typical Installation**

### **INSTALLATION OPTIONS**





This method will take advantage of solar gain within the loft



Part Code 771393

# **Remote/Wired Sensors**



### DRI-ECO-2S

A 2 button switch that gives the homeowner control to increase the airflow within the property when required.



### DRI-ECO-CO<sub>2</sub>

A Carbon Dioxide CO<sub>2</sub> sensor which must be wired directly in to the mains power supply. This ancillary will provide complete confidence in the property's air quality by automatically boosting the fan speed should high levels of CO<sub>2</sub> rise above a set point.



### DRI-ECO-RH

Nuaire's latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.



### DRI-ECO-RM

The Remote Monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.

# DRI-ECO-HEAT-HC

The unique DRI-ECO-HEAT-HC incorporates all of the wireless functions of our DRI-ECO-LINK-HC unit but with the benefit of an integral heating element, located between the flexible duct and ceiling diffuser.

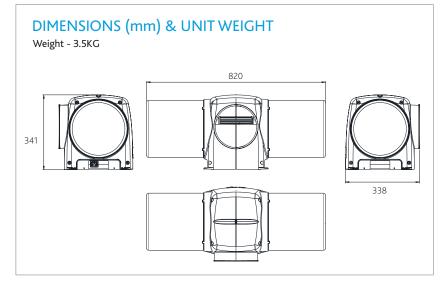
This heating component will temper the air which is distributed through the property via the ceiling diffuser, thus ensuring a comfortable living environment. This pioneering design sees the low watt heater (400w) react efficiently and effectively, guaranteeing an economically friendly product.





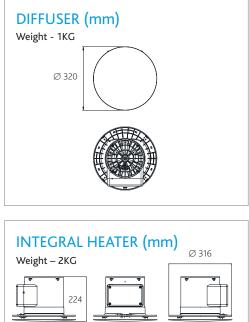
DRI-ECO-HEAT-HC INSTALLATION

## Technical



# Wiring

The unit is supplied with a pre-wired power supply. The fan unit is also supplied with a fused spur. The 3 core mains cable from the power supply should be connected to a fixed wiring installation in accordance with current IEE wiring regulations.





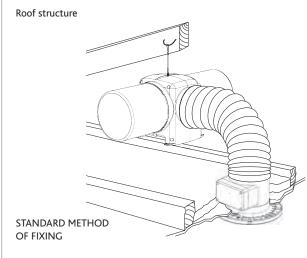
# **Electrical Details**

	Voltage	Consumption
DRI-ECO-HEAT-HC	230V 1ph 50Hz	1.6W(min) 17W(max)

Standard running: 1.6W(min) 15.3W(max) Up to 400W with heater at full load.

# Typical Installation

### INSTALLATION OPTIONS



This method will take advantage of solar gain within the loft

# Remote/Wired Sensors



### DRI-ECO-4S

A 4 button switch that gives the homeowner control to increase the airflow within the property when required.



OPTIONAL METHOD OF FIXING.

Part Code 771393

(AV MOUNTING KIT ON TO ROOF JOISTS)

DRI-ECO-CO<sub>2</sub>

A Carbon Dioxide  $CO_2$  sensor which must be wired directly in to the mains power supply. This ancillary will provide complete confidence in the property's air quality by automatically boosting the fan speed should high levels of  $CO_2$  rise above a set point.



### DRI-ECO-RH

Nuaire's latest Relative Humidity sensor monitors the humidity levels within the home and instructs the unit within the loft to adjust the speed in order to maintain optimum comfort.



### DRI-ECO-RM

The Remote Monitoring device will allow readings to be taken from outside the property to determine how long the unit has been running and the operating speed of the unit. This will benefit the social housing provider when checks are carried out to ensure measures put in place to alleviate condensation issues are being adhered to, without having to enter the property.



# **Consultants Specification**

Low energy Positive Input Ventilation system for use in homes with a loft.

The unit shall be robustly constructed from ABS polymer.

Flame retardant filters of G4 grade, surface area approximately 0.47m<sup>2</sup> (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection. The unit's average power consumption shall be 0.17 watts per I/s airflow; excluding power consumed by the heating element within DRI-ECO-HEAT-HC when running..

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh 3.5kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/ duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit's operational time. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

### DRI-ECO-HC

The DRI-ECO-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft space is anywhere between 19-24 degrees celsius. The unit's 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. This unit has all of the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property.

The unit shall be offered with a 7 year warranty.

### DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit's 'Fixed Temperature Heat Recovery' strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled or not installed, commissioned and maintained in accordance with the details contained in the I&M manual and general good practice.

### DRI-ECO-HEAT-HC

The DRI-ECO-HEAT-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit's 'Fixed Temperature Heat Recovery' strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. A heater section incorporating a 400w heating element shall be fitted to the diffuser. It shall be electronically controlled so as to minimise energy use. A temperature sensor shall be fitted to the outlet of the heater and will control the output of the heater in an attempt to maintain the set point. The set point will be adjustable between 6°C and 20°C. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled or not installed, commissioned and maintained in accordance with the details contained in the I&M manual and general good practice.



# Nuaire invented **PIV** over 40 years ago!

