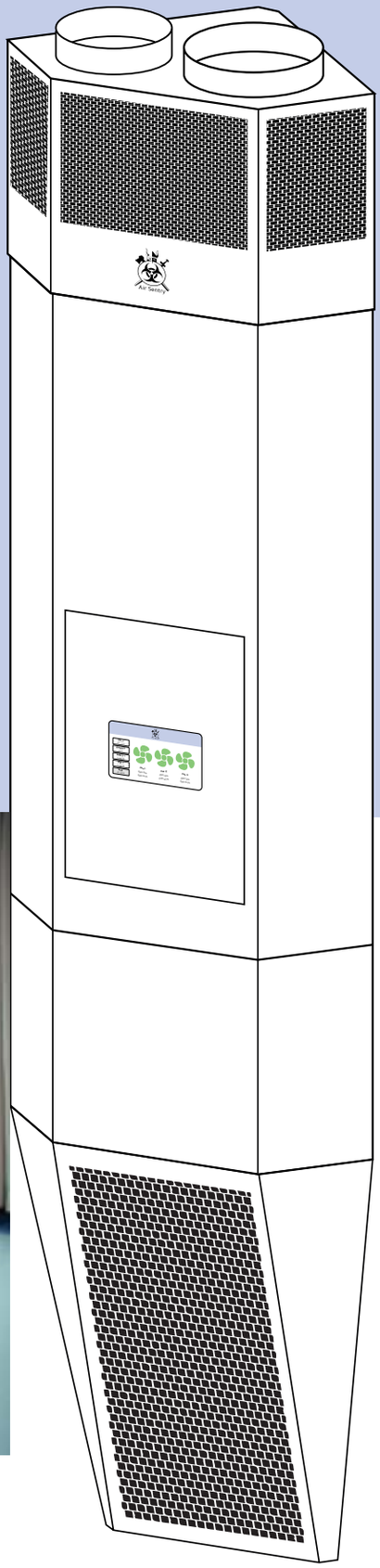
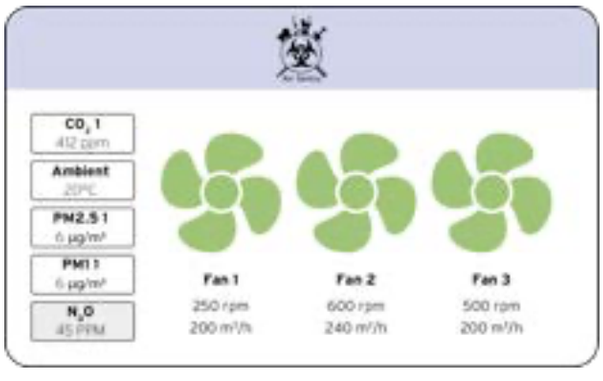
Air Sentry

GENESIS®
& ARISTOTLE®

Life Support for Buildings







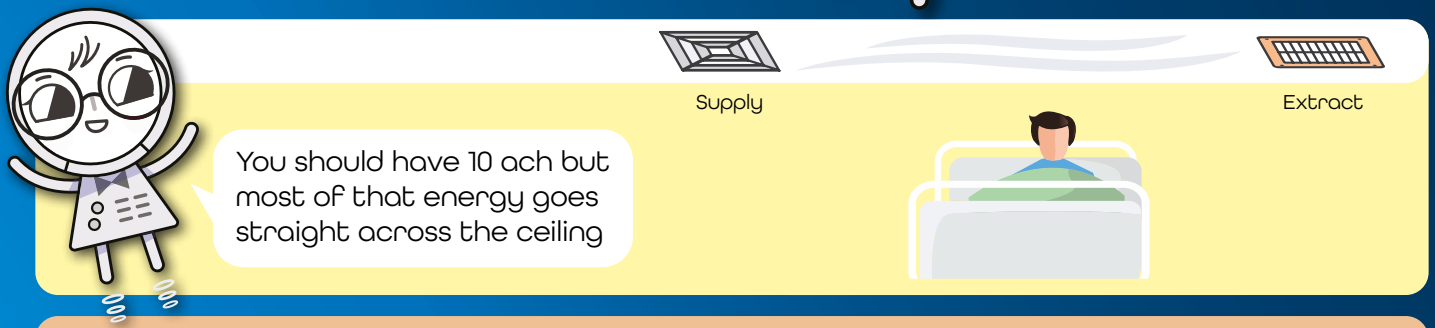
AIRSENTRY.CO.UK

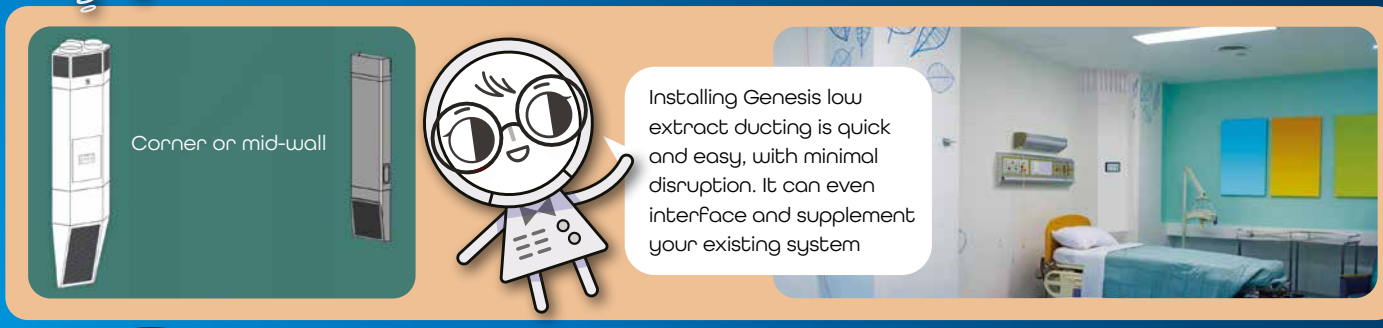
AIR SENTRY
AIR PURIFICATION SYSTEMS

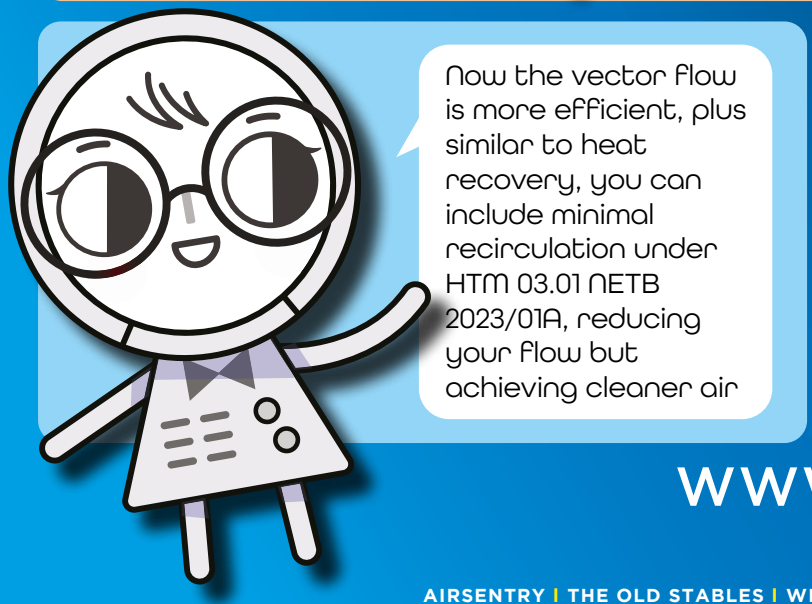














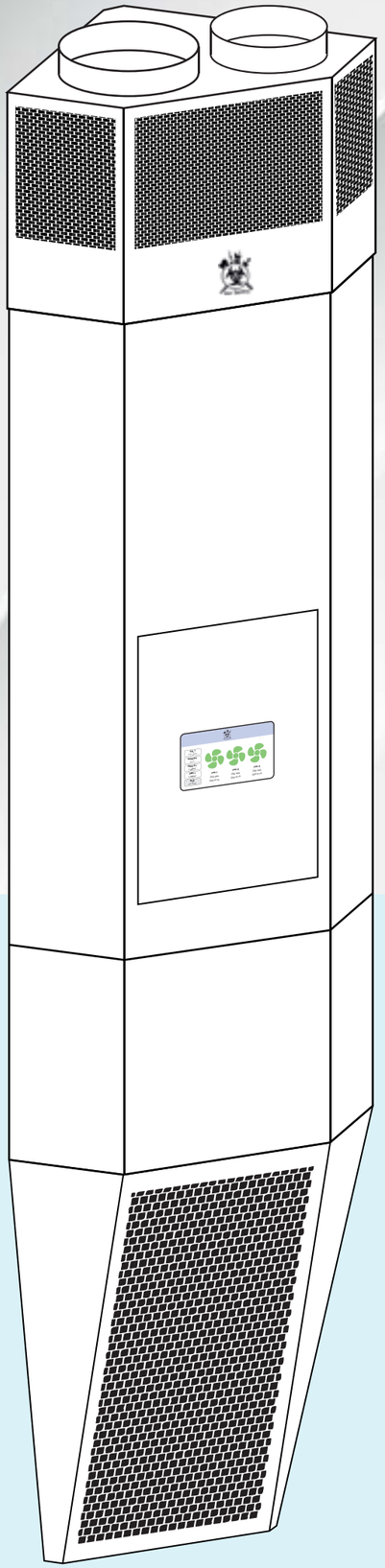
Download your brochure today at

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01666 818087 webrequest@airsentry.co.uk

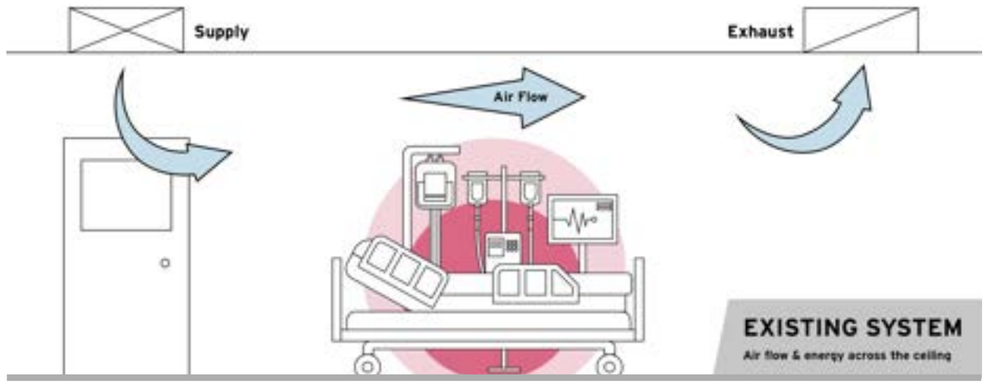
AIRSENTRY | THE OLD STABLES | WEST STREET | GREAT SOMERFORD | WILTSHIRE | SN15 5EH

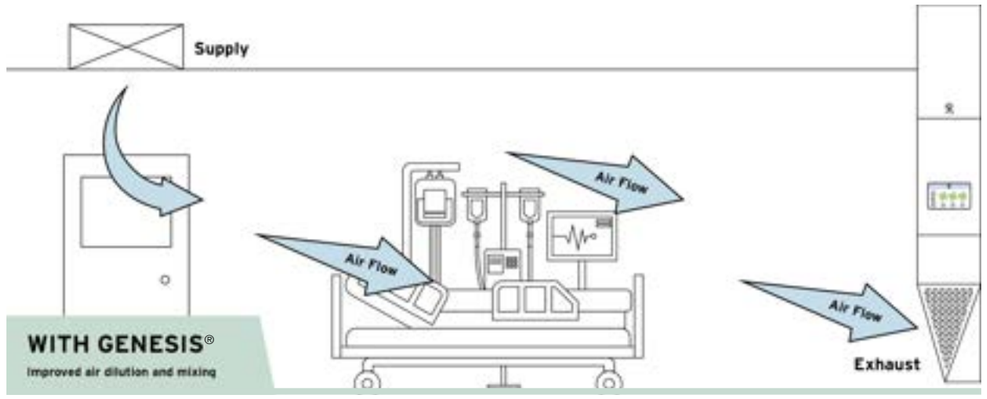
*Air Sentry will allow a trade in of a non-conforming unit from other suppliers for a credit of £500 against one of their clinical air systems (which can be purchased or rented.) Air Sentry systems are fully compliant with the new HEPA guidance. The returned non-compliant units may be suitable for schools. Where this is the case, they will be safety checked and then donated to the nearest state school to the purchasing hospital with the hospital highlighted as the donor under our 'HEPA Safe' programme. Air Sentry will advise on potential compliance of existing units upon request'



GENESIS®

In its simplest form Genesis® offers immediate low-level air extraction without the requirement for extensive building work.





THE BENEFITS OF GENESIS® LOW-LEVEL INCLUDE:

Room corner or mid wall installation*
- Ease of installation
- Low installation cost

Standard 200mm HVAC circular ducting
- Ease of installation
- Low installation cost

Can connect to existing HVAC system
- Low cost

Offers pressure differential with or without existing HVAC system
- Can be used anywhere to provide positive or negative pressure options—allowing optimal use of healthcare spaces.

** see last page*

Optional recirculation via HEPA 14
- Can be used to improve ventilation
- Meets standards - HTM03/NHSE Guide on HEPA Filtration
- Dilution of pathogens
- Reduction in airborne infection risk
- Reduction in pathogen surface deposition
- Potential for energy reduction cost - helps towards Net Zero
- Can potentially extend AHU working life
- Low installation cost

Supply Air with or without existing HVAC system
- Flexibility of use
- Meets standards - HTM03
- Low purchase cost
- Low installation cost
- Ease of installation fit

Anti-ligature option for air grilles
- Can be used in high risk patient environments

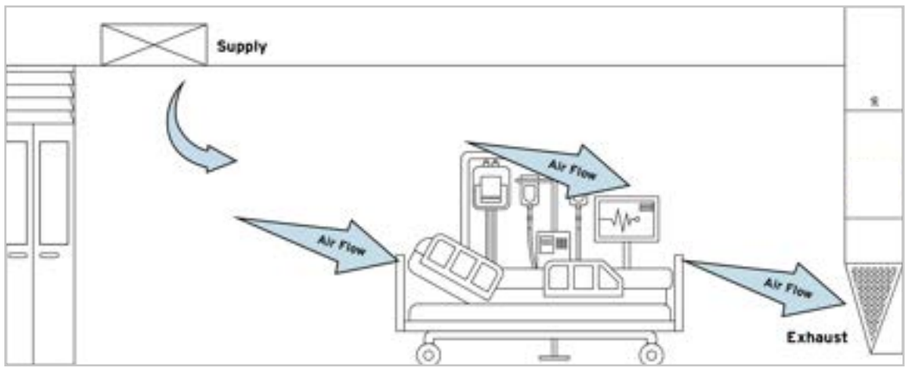
GENESIS®

Low-level air extraction that suits your needs.

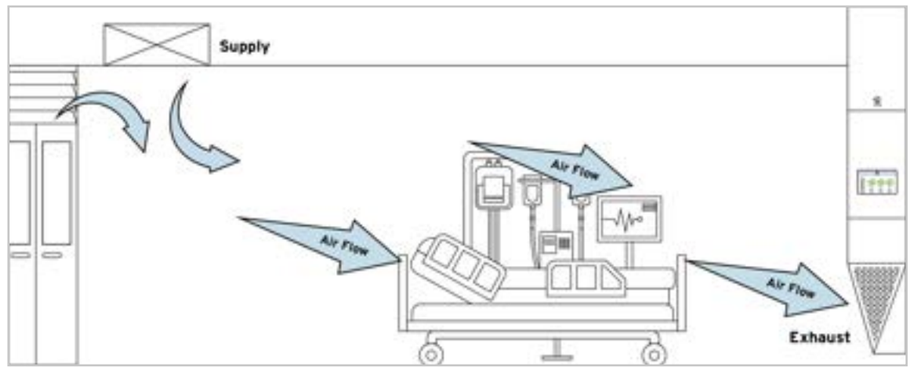
Genesis® offers a range of modular upgrades solving many ventilation challenges.



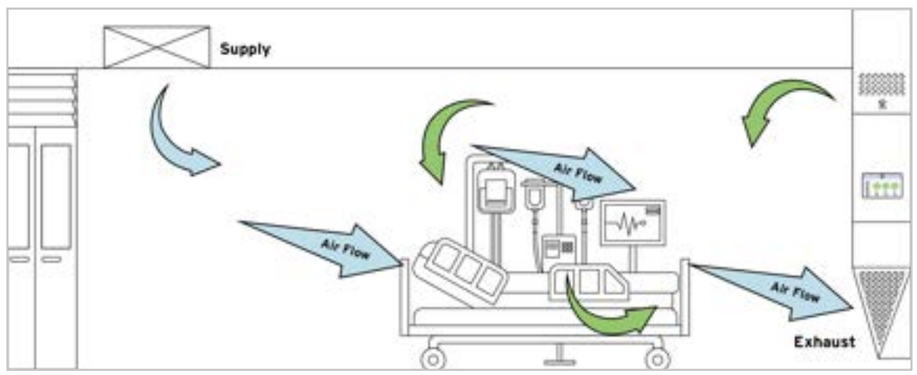
GENESIS® // LOW-LEVEL EXTRACT



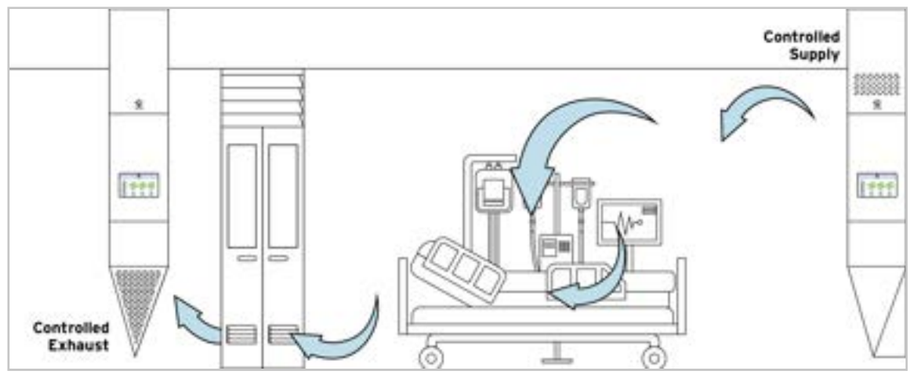
GENESIS® // LOW-LEVEL EXTRACT & NEGATIVE PRESSURE



GENESIS® // LOW-LEVEL EXTRACT & HEPA FILTERED RECIRCULATION



GENESIS® // SUPPLY WITH LOW-LEVEL EXTRACT & POSITIVE PRESSURE

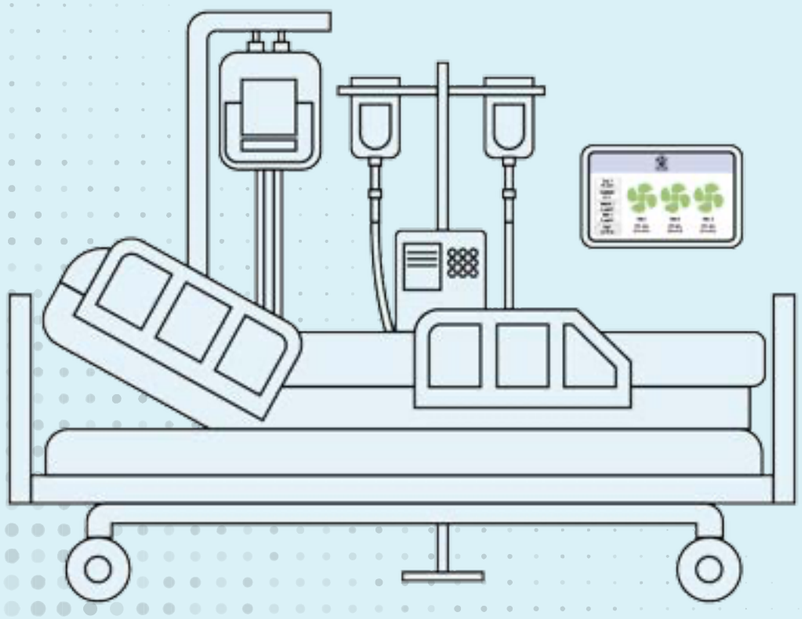


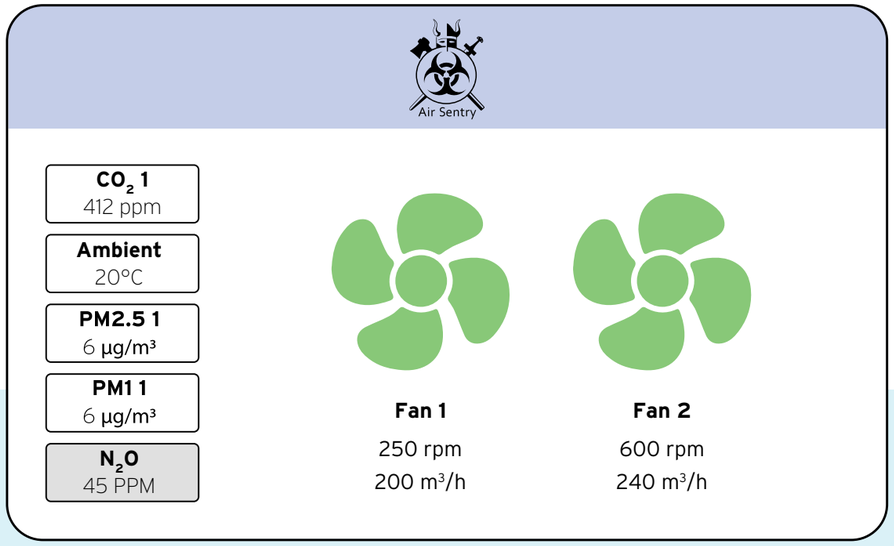
ARISTOTLE®

The pioneer in comprehensive monitoring, alerts, and controls.

Aristotle® stands as the **first of its kind**, offering a cutting-edge solution to transform the way you monitor and control air quality.

Aristotle® is designed to exceed the requirements of BS40102-1:2023 for Indoor Air Quality.





ARISTOTLE® OFFERS A RANGE OF AIR QUALITY PARAMETERS

Comprehensive monitoring of Indoor Air Quality (IAQ) parameters—Particles PM1/PM4/PM2.5/PM10; Nitrous Oxide, Temperature, Relative Humidity, Barometric Pressure, Pressure Differential, Fan Speeds, Air Flow Rates, Volatile organic compounds (VOCs)

- Instant continuous data
- Customer configurable—only monitor what is important for each environment
- Monitors N_2O—especially helpful in delivery suites.

Up to 15 rooms/zones per Aristotle® control group

- Flexibility – multiple control groups can be arrayed to form larger systems to effect a plant room or whole of hospital system
- Cost effective (e.g. One Aristotle® control group can monitor N_2O in up to 15 birthing rooms in a delivery suite)

Can be standalone or installed in Genesis®

- Can improve any ventilation system

Ethernet/BACNET MODBUS etc.

- Ease of integration into BMS

Control of DC fan speeds

- Automation of ventilation based on set IAQ parameters
- Switch between positive or negative pressure

Alarm/Alert

- Alerts to changes in IAQ
- Alerts to changes in N_2O

Control

- Both local & BMS

Useable on any HVAC system

- Low cost
- Ease of installation
- Can potentially extend AHU working life

Filter pressure differential

- Can alert for required filter change across full range of HVAC filters

Security

- Extensive security as standard. Including individual user data and access levels

Multiple Communication Options

- Full range of communication options available

Data Retention of 25 years

- Research

Future Algorithm

- Patent granted on airborne disease detection

ARISTOTLE®

Comprehensive indoor air quality monitoring

Customer defined parameters can include any of the following:

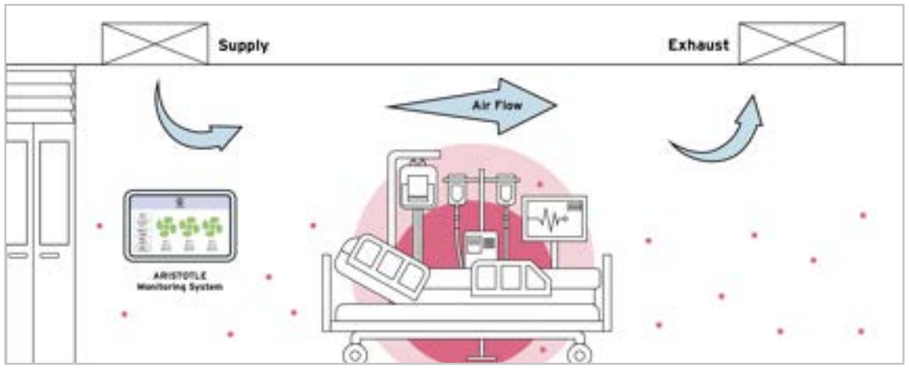
- CO_2
- Particles–PM1/PM2.5/PM4/PM10
- Nitrous Oxide
- Temperature
- Relative Humidity
- Barometric Pressure
- Pressure Differential
- Fan Speeds
- Flow Rates
- Volatile organic compounds (VOCs)
- PM4 monitoring

To be integrated soon:

- Radiation (Alpha, Beta, Gamma, Neutron)
- Radon gas via Alpha, CO, NO3 and NOx.
- Disease Detection

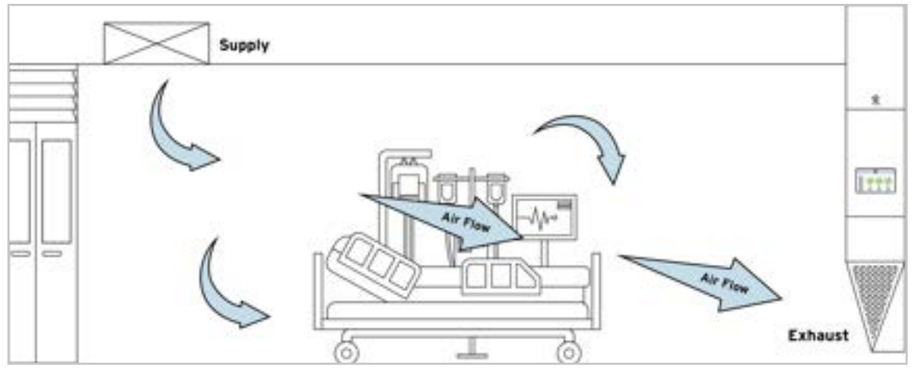
Please ask if you have a requirement not listed yet.

EXISTING AHU AND HVAC //



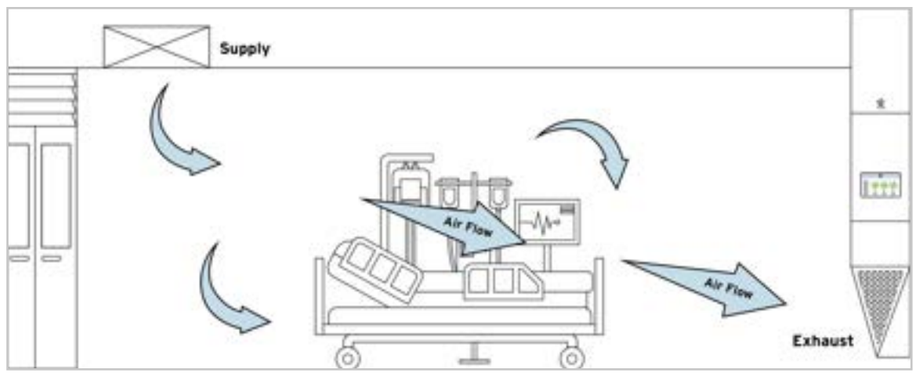
ARISTOTLE® MONITOR //

Used to lower AHU output maintaining safe air quality



EXAMPLE OF GENESIS® //

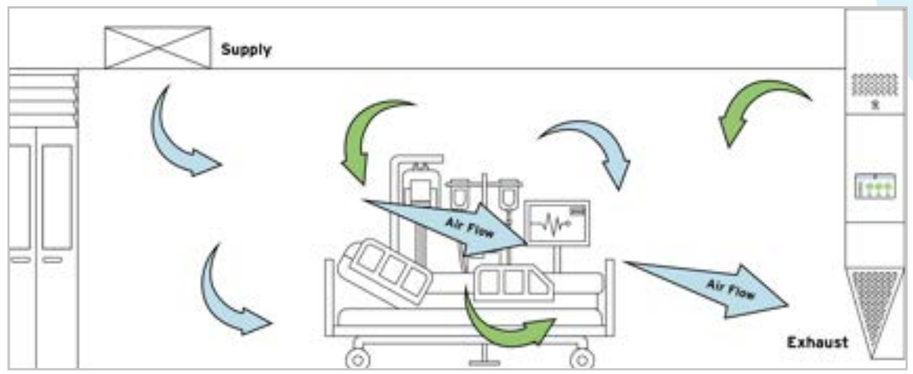
With low-level extract and Aristole® Monitoring of IAQ parameters



ARISTOTLE® CONTROLS //

Aristotle® controls replacing supply ACH with recirculated eACH to maintain safe air parameters and **reduce AHC energy usage up to 40%**

ENERGY SAVINGS OF UP TO 40%



GENESIS® & ARISTOTLE®

Managing Nitrous Oxide

Excessive N_2O levels in maternity wards and birthing suites pose a risk of overexposure for hospital staff.

Current ceiling extract ventilation contributes to this issue as N_2O, being heavier than air, accumulates at lower levels.

Adhering to the new HTM-03-01 guidelines, **Genesis**® provides a low-level extract solution that effectively eliminates N_2O. Our system requires minimal building modifications, ensuring a seamless integration.

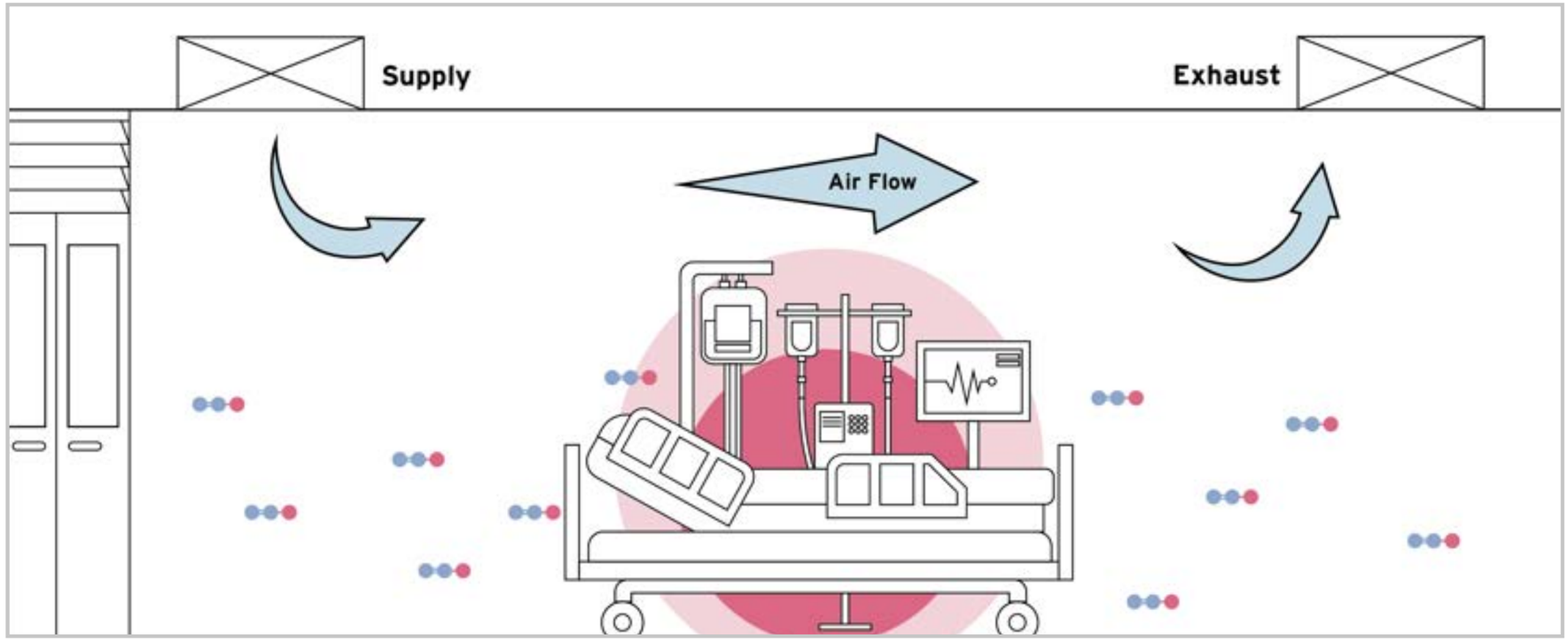
Additionally, **Aristotle**®, our advanced monitoring system, tracks N_2O and other volatile organic compounds (TVOCs), triggering alarms at predetermined levels for a proactive safety approach.

FIG 1 // EXISTING AHU

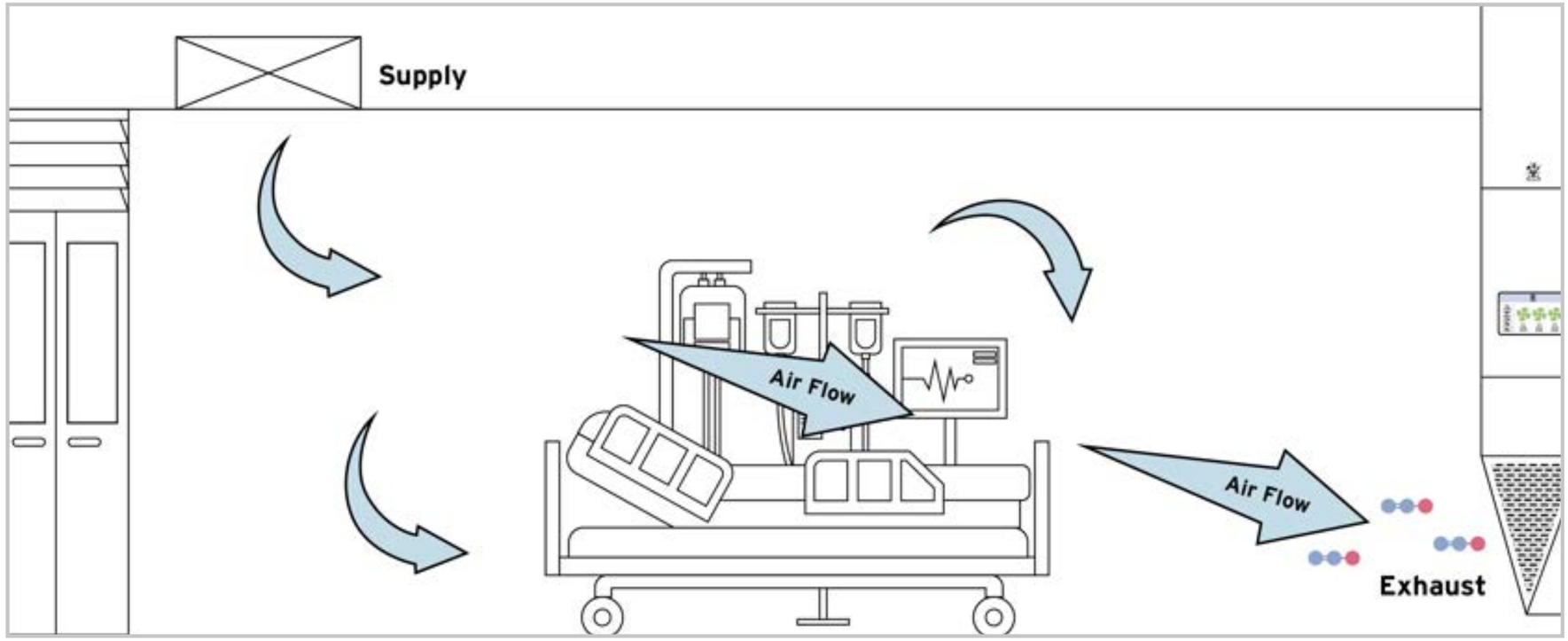
Existing AHU the main air flow is across ceiling, N_2O being heavier than air remains in delivery room.

FIG 2 // GENESIS®

Genesis® with low-level extract removes N_2O from delivery room



// FIG 1



// FIG 2

GENESIS® & ARISTOTLE®

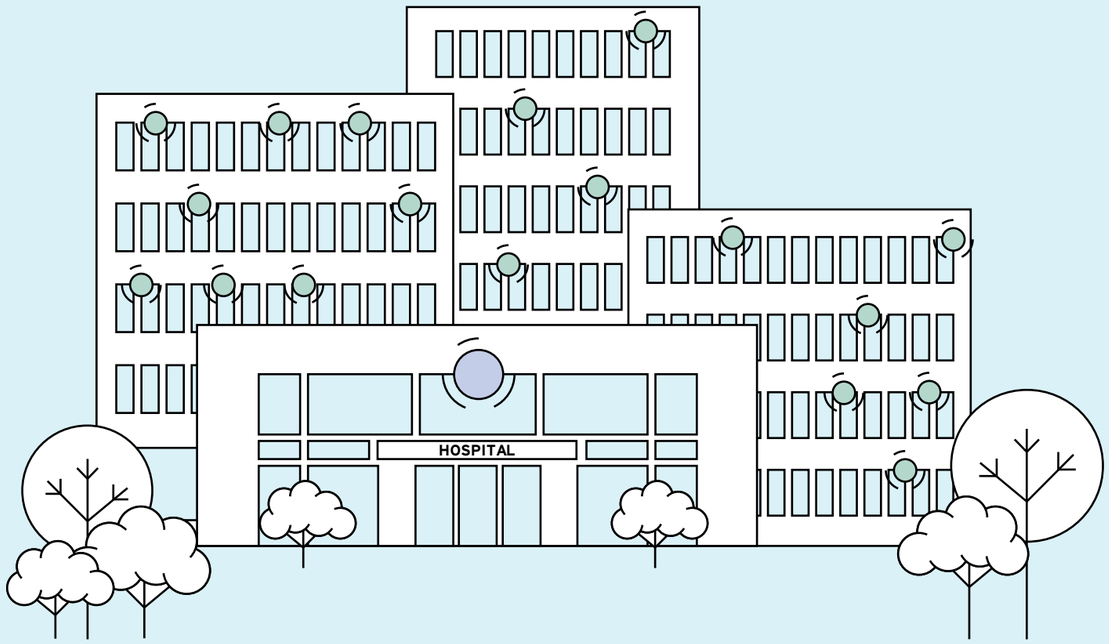
Scalability

Genesis® and Aristotle® offer a scalable solution for managing air quality in healthcare environments.

They provide a seamless transition from individual rooms to entire hospital wards and ultimately the entire facility. Whether you're addressing specific concerns in a single room or seeking comprehensive air quality control for an entire hospital, our systems grow with your needs.

By implementing Genesis® extract technology at various levels and integrating Aristotle's monitoring capabilities, you gain a comprehensive approach to air quality management.

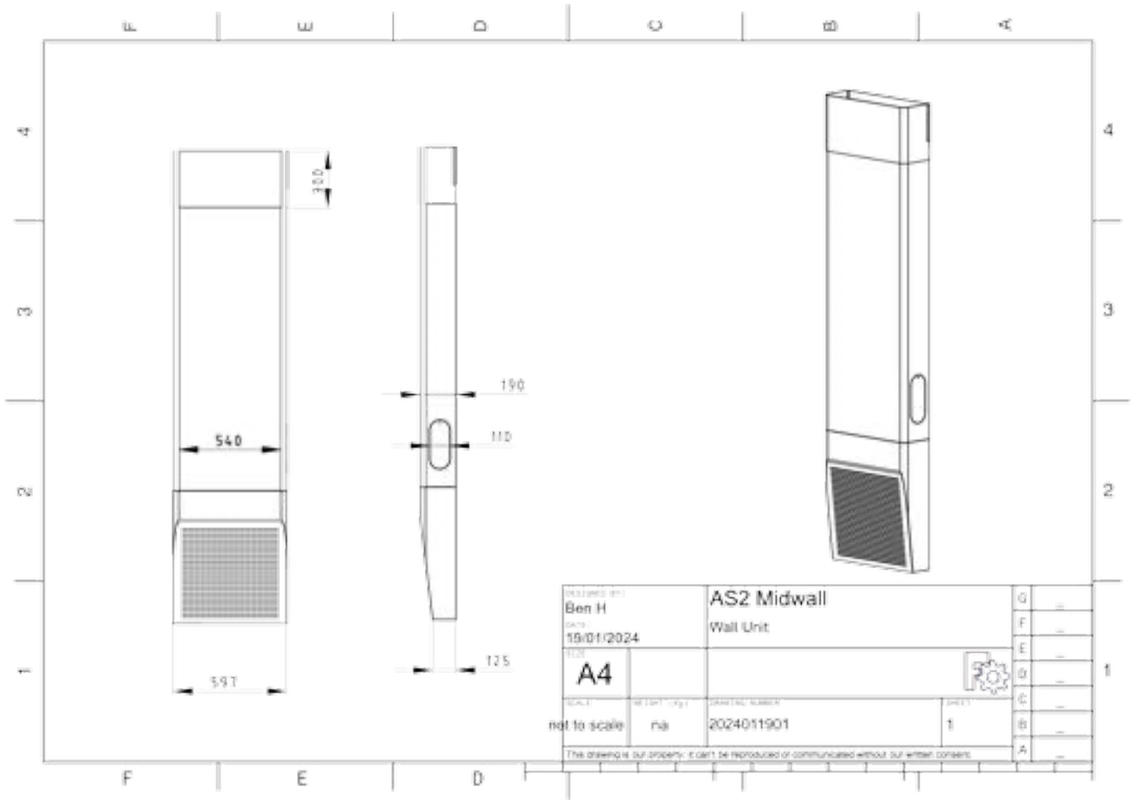
This scalability empowers healthcare facilities to adapt and expand their air quality control measures as demands increase, putting you in control of a healthier and safer environment for both staff and patients.



CONFIGURATION

	Stand Alone Genesis®	Genesis® with Aristotle®	Aristotle® with existing HVAC (no Genesis®)
Low Extract Only	●		
Low Extract and Supply Only	●		
Recirculation		●	
Low Extract with Recirculation		●	
Low Extract, Recirculation and supply		●	
Positive Pressure		●	
Positive Pressure with Low Extract*		●	
Negative Pressure with Low Extract		●	
25 Year Data Retention		●	●
IAQ Sensors -			
Temperature		●	●
Delta T		●	●
CO2		●	●
Particle Counts (1,2.5,4 & 10µm)		●	●
N2O		●	●
Barometric Pressure		●	●
Relative Humidity		●	●
Radiation**		●	●
15 Zones per group ***		●	●
Alert/Alarm		●	●
Filter Monitoring		●	●
DC Motor Control/Feedback		●	●
Communication			
Ethernet		●	●
BACnet		●	●
MODBUS		●	●
Disease Detection**		●	●

*Low extract outside of room
**Future implementation
***Multiple groups can be connected into a larger system


F
E
D
C
B
A
4
3
2
1
330
540
597
190
110
125
AS2 Midwall
Wall Unit
Ben H
19/01/2024
A4
not to scale
na
2024011901
1
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Air Sentry

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Email: webrequest@airsentry.co.uk

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