Purpose-driven ventilation for healthy, sustainable buildings

Today’s Megatrends
Transformative changes are reshaping the world around us and are having an impact on how Life Sciences and Critical Environments operate. Today’s megatrends present challenges, but more importantly, they offer new opportunities to intelligently reduce operating costs, create long-term resilience, establish safe and healthy environments, reduce carbon footprints, and more.

Increasing energy costs, new technologies, and ESG principles/priorities drive focus on energy efficiency, green labs, sustainability, and resilience.

Resilience
A culture of digital innovation allows life science organizations to anticipate, plan for, and respond to market dynamics as well as:
• Corporate + administrative goals
• Carbon taxes
• Electrification
• Utility incentives
• Environmental, social, and governance initiatives

Key Factors
• Resilience
  • Adapt quickly to disruption and market changes while maintaining continuity

Health + Safety
Make rooms and buildings as safe, healthy, and comfortable as possible:
• Indoor air quality (IAQ)
• Ventilation
• Attracting and retaining talent
• AI and analytics

Key Factors
• Health + Safety
  • Prioritize employee wellbeing

Digitalization
Integrate digital technology into all areas of the life science operation to:
• Energy and operational efficiency
• Monitoring and compliance
• Create transparency
• Predict downtime and improve availability
• Improve lab quality and productivity

Key Factors
• Digitalization
  • Life science customers take advantage of digitalization to gain a competitive edge

Deep energy savings (as much as 60%)
Address environmental goals + mandates
Accurate IAQ for the life of the building
Sustainable, optimized ventilation control
Actionable, data-driven insights
Powerful occupant communications

AQGARD
Industry-leading platform for ventilation management

How it works
Intelligent, accurate ventilation is at the heart of any Smart Lab design. AQGARD helps to create an energy efficient, safer, and healthier work environment by having a positive impact on indoor air quality – which has been proven to improve cognitive function, reduce sick days, and protect occupants from airborne hazards/particulates.

Air Samples
Air packets are drawn from individual test areas through the air data router

Routing
Air packets are routed sequentially to the sensor suite

Analysis
The sensor suite analyzes each air sample

FeedBack Loop
Smart signals are sent to the lab/building management system for ventilation control

Active control
More than simply collecting data | Smart ventilation signal
Seamless BMS integration | Energy efficiency | Carbon footprint improvements

Smart communication
Simple / powerful IAQ and energy savings | Analytics for building operators
Confidence for occupants | API integration available

Accurate for life of your building
Sensors swapped every 6 months | True differential sensing
Assurance program for all components | Zero owner maintenance responsibility

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