

ACESIAN

CRITICAL ENVIRONMENT
AIRFLOW SOLUTIONS



EXCEPTIONAL QUALITY; OUTSTANDING PERFORMANCE; UNCOMPROMISED SAFETY



LABORATORY & CRITICAL SPACES SOLUTIONS

what & where?

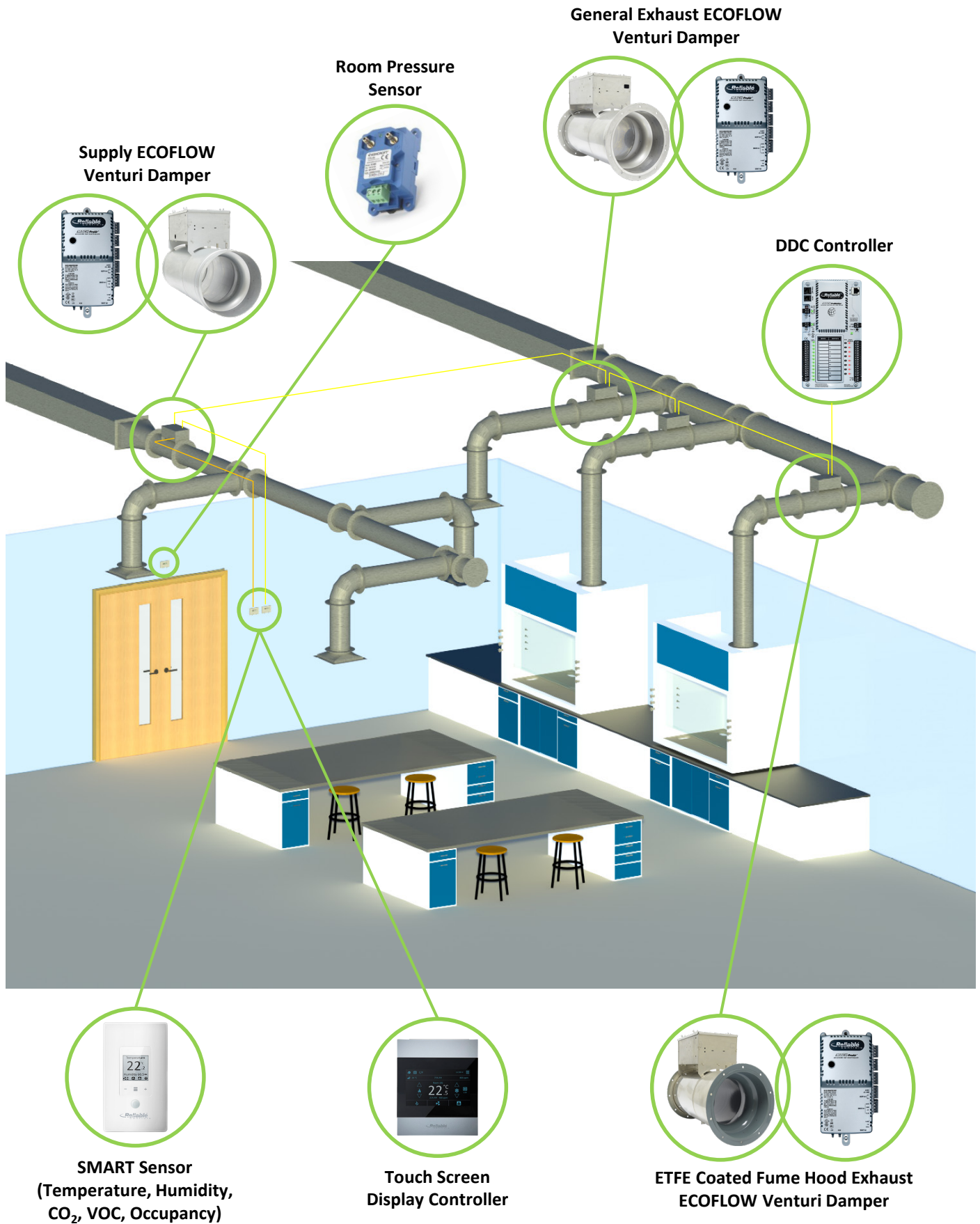
Critical spaces, laboratories, hospitals and etc, what do they have in common? All of these specified requires the system of a precise airflow control. There is paramount importance in an aspect; the aspect of safety. Safety for all critical spaces, laboratories and hospitals as well as the patients, doctors and staff.

Delivering safe, energy efficient laboratory control and critical airflow applications, ACESIAN's Critical Environment Airflow Solution with ECOFLOW Venturi Damper is engineered to ensure the environmental integrity, occupant safety and energy efficiency by integrating pressurization control, temperature, humidity, hazardous exhaust and demand side ventilation.

Our Critical Environment Airflow Solution is designed with flexibility as key to be able to align with other third-party systems to provide compatibility when incorporated together; additionally, it features the ability to seamlessly integrate with any Building Management System (BMS), providing a powerful platform for all sectors ranging from a small room to number of pressure-controlled spaces even up to an entire building of such rooms.



laboratory solutions



all-in-one innovative & reliable system for safety, efficiency, value & comfort



maximum flexibility with Open System Architecture

The open BACnet® communication protocol and the ability to add interfaces to connect devices that communicate via Modbus, LonWorks® etc ensures an open system architecture.

This, in turn offers an effective integration capabilities together with maximum flexibility for customization and scalability for the ever changing needs of facilities.

reliable direct digital control products

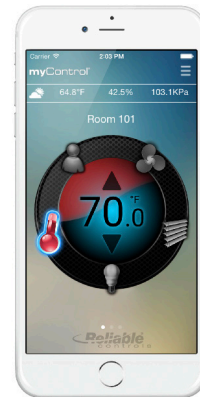
Extensive variety of reliable product lineup: freely programmable and expandable BACnet® building controllers with intuitive and scalable software offers practical solutions to meet the customer's needs.

Tested by third-party living laboratory and certified to meet or exceed the BACnet® Building Controller (B-BC) device profile, the highest level of interoperability.



access from anywhere, anytime

Our solutions offer easy operation and monitoring to create perfect building conditions. Facility managers or operators can remotely access the buildings when away. The solution allows secure access to the building from number of different devices such as web browser, tablets or mobile phones, anywhere, anytime.



user-friendly & impressive interface

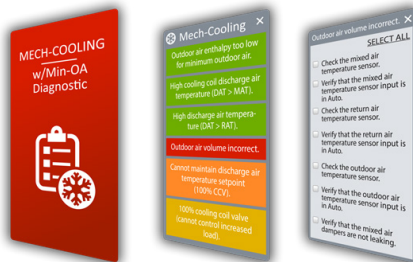
With a fully customized user interface, it allows anyone-regardless of background or experience-to easily take control, even first-time users will feel right at home. Our system ensures that there is administrative ease and quick access to the information you need.



software



Easy-to-learn and simple-to-use building automation software products, which are flexible and scalable in application and programming, protected by BACnet® secure network solution.



IFDD FlexTiles

The ART of Building Sustainability: Technology that supports real-time FDD (Fault Detection & Diagnostics)

Specify integrated FDD (IFDD) that delivers real-time fault detection, step-by-step root cause diagnostics.

RC - Webview: Compliance to U.S. Food and Drug Administration (FDA) TITLE 21 CFR PART 11



Part 11 prescribes that electronic data in regulated industry processes meet the same legal requirements as paper records. Some of these include:

- The ability to discern invalid records
- The ability to generate electronic copies of records
- Automatic generation of an audit trail
- Control over user access
- Use of unique secure signatures
- Secure linking of those signatures to records



Certified Open Standard

Ensure a strong level of interoperability by using BACnet® protocols which have third-party listing laboratories to verify adherence to your protocol's form and function

100% Backward Compatibility

Enjoy the long term benefits of suppliers who engineer a path forward to new technologies while remaining backward compatible without third-party gateways or hardware replacement



5 Years Warranty

Enjoy the offering of an industry-recognized 5-Years Hardware warranty for Reliable Controls Products

solution of domination

ACESIAN Critical Environment Airflow Solution, highly configurable, feature-rich control platform that builds on accurate pressure independence and speed of response of the Acesian Ecoflow Venturi Damper. These characteristics, along with Acesian control applications, play an important role in establishing primary & secondary containment barriers. The key benefits to owners & operators of these facilities include:

safety assurance for space pressurization & containment

accuracy

For the entire flow range, ACESIAN's valves and solutions maintains an accuracy of $\pm 5\%$.

pressure independent operation

As duct static pressure fluctuates, the airflow will still be precise & accurate.

fast response time

Assurance of uncompromised fume hood containment and precision directional airflow.

chemical resistance & fire safety

Ability of withstanding highly corrosive chemicals & excellent fire protection through FM approved ETFE (Ethylene Tetrafluoroethylene) coating & high quality steel construction.

clean & green opportunists

minimal pressure loss

Probe-less airflow measurement technology with its pressure regain ability, Ecoflow Venturi Damper operates at a pressure drop that is low by industrial standards.

high turndown ratio

Ecoflow Venturi Damper provides accurate airflow control for turndown ranges that are up to 10:1 as compared to others that offers up to 3:1.

simplicity is key

cost-effective design

Our ECOFLOW Venturi Damper saves cost for business & clients in ductworks aspect as they do not require any straight duct runs, either upstream or downstream, yet maintaining the accuracy.

minimal testing, adjusting & balancing

The ECOFLOW Venturi Damper is factory calibrated with minimal adjustment required.

low maintenance

Factoring in the fact that it is probe-less, no internal parts involved in airflow measurement is exposed in the air stream, indicating the minimization of routine maintenance.

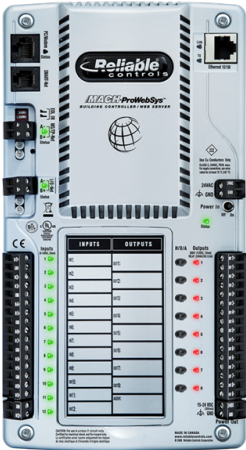


what makes it work?



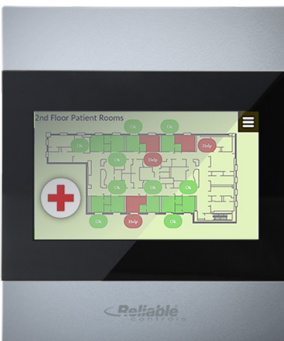
Acesian ECOFLOW Venturi Damper

A dedicated product engineered for Critical Environment Airflow Solutions. Real-time accurate flow measurement ($\pm 5\%$) using Probe-less technology and fast response control through freely programmable BACnet® Building Controller (B-BC), allowing Ecoflow Venturi Damper to respond rapidly and accurately maintain the desired airflow independent of static pressure changes.



MACH-ProWebSys MPWS

The unique 3-in-1 design of the MACH-ProWebSys combines a BTL-listed BACnet® Building Controller [B-BC], a BACnet® Operator Workstation [B-OWS], and a powerful web server in a single package no larger than a typical controller. There is no software to download and no IT server to maintain. Every MACH-ProWebSys can controls hundreds of sensors and actuators using standard protocol networks.



MACH-ProView MPV

The Reliable Controls MACH-ProView is a powerful and elegant BACnet® Building Controller [B-BC] and BACnet® Operator Display [B-OD] which provides a plenitude of attractive, high resolution, graphical interfaces to access, control, and monitor the comfort and energy of any space

what makes it work?



MACH-ProAir MPA

Reliable Controls MACH-ProAir is a fully programmable BACnet® Building Controller [B-BC] with numerous downloadable standard codes and flexible I/O options.



SMART Sensor

A complement to any room, the Reliable Controls SMART-Sensor series delivers a modern, Networked-sensor solution that allows you to connect with up to 10 configurable parameters related to your space with option of VOC, CO₂, Occupancy Sensor, RH, input and output points.



Differential Pressure Transmitter

The Ashcroft® CXLdp differential pressure transmitter is designed for air handling applications including HVAC building systems, airflow metering and room pressurization control. It utilizes Ashcroft's SiGlas™ technology that enables unrivaled measurement sensitivity and long term repeatability.

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