COMPREHENSIVE CONTROL
FOR CRITICAL SPACES

Building control for critical applications, where the demand for stable, accurate, and repeatable airflow is priority one, goes far beyond the capabilities and reliability of typical a la carte control solutions.

MEET THE CRITICAL SPACES CONTROL PLATFORM FROM PHOENIX CONTROLS

It's a complete critical space platform where the proven Phoenix Controls venturi valve is coupled with native BACnet controllers, high speed linear actuation, and digital displays, elegantly choreographed to control the most demanding environments. One complete system. Because compromise isn't an option.

Renowned for our precision Venturi valves, Phoenix Controls has refined the art and science of controls for critical spaces by analyzing their unique demands and starting with a platform that can adapt, grow and upgrade. Whether you're concerned with precise pressure control, challenging zone balance sequences, tight tolerance temperature control, or room diversity, the system can be tailored to your needs, and all with energy management tools built in, to help control your energy use.

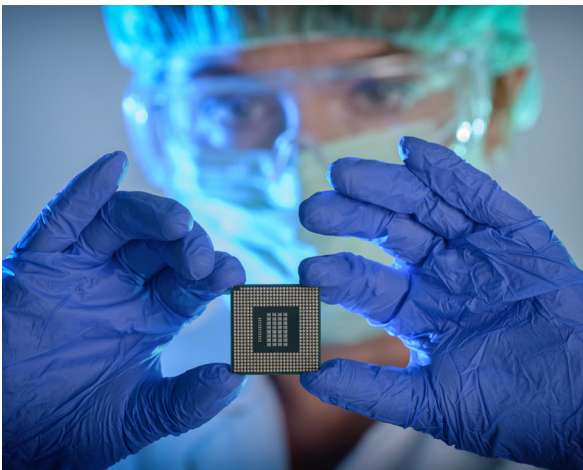Lab view dashboard

APPLICATIONS

For research environments with high speed VAV fume hoods

Where fume hood containment and high speed of response really count, the Critical Spaces Control Platform can manage the demands of laboratory spaces with multiple fume hoods, multiple temperature zones, and high air change rates while built in diversity and usage-based controls can assist in energy management. A modern fume hood display shows real-time information relevant to the fume hood user. Zone balance and offset control are managed with a one-second speed of response, and several emergency control modes can be programmed for flexible room sequencing. Bluetooth connection to the Phoenix Controls Mobile app allows support for viewing alarms, monitoring space conditions, and making setpoint changes.

For life sciences / vivariums

Zone balance, comfort control and air change rate diversity for general research spaces are key, as well as maintaining more natural, lower stress environments for research animals. The Critical Spaces Control Platform can manage a uniquely broad array of demands within a single facility. Up to four standard speed venturi valves can be controlled per native BACnet controller for simpler installation without compromising controllability. Zone balance, offset control, switching polarity of spaces (positive to negative or vice versa), temperature control, humidity control, and other sequencing can all be accomplished with one zone controller.
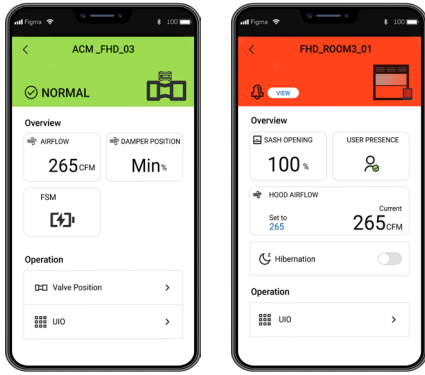

For high-purity manufacturing environments

Precise pressure control coupled with high air change rates are critical for high-purity manufacturing, but the cost of operations can impact the bottom line. The Critical Spaces Control Platform helps maintain the desired environment while offering the flexibility to re-purpose spaces quickly, manage air exchange based on monitoring iso-class and environmental quality parameters, and reliably and repeatably cascade pressures from space to space without having to rebalance or create deviations.

For healthcare, including operating theaters and isolation spaces

From surgical suites and patient rooms to intensive care units and compounding pharmacies, nowhere is a comprehensive environment control platform more necessary. The integrated controller maintains the proper flow control relationship between all valves, ensuring proper offset control for all spaces while allowing variation in flow for more "room state flexibility". Ventilation flexibility with the Critical Spaces Control Platform easily allows the hospital to manage ventilation requirements more efficiently to address occupancy, environmental quality, pandemic modes, changing temperature demands, and even customized control for surgeons or surgical procedures in the operating room theaters.
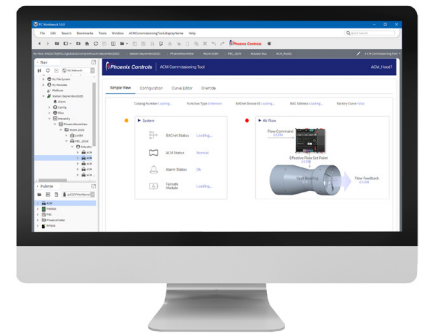
Flow Manager app

- For end users and technicians

- Easily make setpoint changes within space

- Quickly diagnose alarms or issues within system

- View real-time system data

- Apple and Android app

High speed actuator control module (ACM) with fail-safe module (FSM)

- Actuator control network - BACnet MS/TP (RS485)

- Supports optional DP sensor or pressure switch

- Pluggable fail-safe module (FSM) add-on

- Supports 24Vdc HISEA linear actuator

- Easy manual controls

- Installed on valve

Phoenix Controls Workbench software

- Niagara 4.0 based software

- Used by the Phoenix technician to configure the system

- Configure, diagnose, and maintain FHD, ACM, PBC, and other lab components

Connect with your Phoenix Controls representative to experience what a Critical Spaces Control Platform can do for your facility, and your business results.

hwll.co/phoenix-cscp

Programmable BACnet controller (PBC)

- Supports Bluetooth

- Native BACnet MS/TP BMS integration

- Actuator control network - BACnet MS/TP (RS485)

- 24VAC

- Free programming within Niagara 4 environment

- Can be installed on valve or in panel for easy access

Digital fume hood display (FHD500)

- Actuator control network - BACnet MS/TP (RS485)

- Supports Bluetooth

- Display only or full function configuration

- Supports analog setup for CVV, 2-state, drive, and network connection to ACM/PBC