Laboratory Solutions
Fume Hood and Laboratory Space Controls
LABORATORY SOLUTIONS

**Laboratory Space Controller**
- Native BACnet MS/TP (BTL Listed)
- High-speed room level network
- Control multiple supply and general exhaust valves
- Temperature and humidity control

**Supply Venturi Valves**
- Medium (0.6 to 3.0 in.w.c.) or low (0.3 to 3.0 in.w.c.) pressure operation
- High-speed actuation
- Characterized and calibrated using NIST traceable equipment
- Integrated silencer and reheat coil options
- Analog operating pressure feedback

**Room Pressure Sensor**
- Maintenance and calibration-free sensor technology
- Accurate to 3% of reading ± 0.0006 in.w.c. (0.02 Pa)
- Designed to prevent buildup of airborne particulates

**Thermostat**
- LCD, dial, or blank-face options
- Optional humidity monitoring
- Full setup and balancing functions
- Computer connection port using Price LINKER2

**General Exhaust Venturi Valves**
- Medium (0.6 to 3.0 in.w.c.) or low (0.3 to 3.0 in.w.c.) pressure operation
- High-speed actuation
- Characterized and calibrated using NIST traceable equipment
- Integrated silencer options
- Analog operating pressure feedback

**Fume Hood Controller**
- Sash position, sidewall sensor or combination face velocity control
- High-speed response
- LCD fume hood monitor
- Data reported over BACnet through LSC

**Fume Hood Exhaust Venturi Valves**
- Medium (0.6 to 3.0 in.w.c.) or low (0.3 to 3.0 in.w.c.) pressure operation
- High-speed actuation
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- Integrated silencer options
- Analog operating pressure feedback
- Optional corrosion resistant coatings

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FUME HOOD SOLUTIONS

Fume Hood Controller (FHC)
- Native BACnet MS/TP
- Sash, sidewall, combination control methods
- Multiple sensor inputs
- High speed, stable control

Presence Sensor
- High sensitivity Doppler shift radar detection
- Occupancy logic options provide the ability to customize control to meet application needs
- Low profile surface mount to top face of fume hood

Fume Hood Interface (FHI)
- Digital display
- Customizable light bars
- Full setup and diagnostic menus
- LINK2 port for controller connection to laptop
- Audible and visual alarms

Sash Sensor
- Up to three (3) sensors supported
- 50 in. and 120 in. lengths
- Stainless steel cable
- Easy two-wire connection

Sidewall Sensor
- Up to two (2) sensors supported
- Easy to install
- High accuracy
- Plug & Play connection

Fume Hood Exhaust Venturi Valve
- Up to two (2) sensors supported
- Easy to install
- High accuracy
- Plug & Play connection

Supply Venturi Valve

General Exhaust Venturi Valve

Thermostat

TO PREVIOUS DEVICE

BACnet IP Router

BACnet MS/TP

ANALOG CONTROL

ANALOG CONTROL

LABORATORY SPACE CONTROLLER NETWORK

The Laboratory Space Controller (LSC) is designed for applications that require airflow and temperature control using a dedicated system, that ties in to the fume hoods within the space.

The LSC is a digital controller that maintains a constant volumetric offset between supply, general exhaust and fume hood air valves in VAV systems to ensure accurate control of directional airflow.

Up to 8 supply and general exhaust valves, in any combination, can be connected to the LSC at one time. Concurrently, up to 16 fume hood controllers can be connected as well.

For more information visit www.pricecriticalcontrols.com
VENTURI VALVES

Price Venturi Valves (VV) are mechanically pressure independent control devices designed specifically for laboratory space and fume hood control applications.

Available in variable or constant air volume configurations, the VV is able to control flow without the need for measuring devices in the airstream, giving a high turn-down ratio of 16:1 to reduce air change rates for energy savings.

Price VVs are available with integrated silencers and/or hot water or electric reheat coils as complete assemblies. All silencers and reheat coils are tested and manufactured in-house with designs optimized for close-coupling with Price VVs.

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INTEGRATED OPTIONS

- VENTURI VALVE WITH ELECTRIC REHEAT
  CERTIFIED TO UL1995
- VENTURI VALVE WITH INTEGRATED SILENCER
- VENTURI VALVE WITH HOT WATER COIL
  CERTIFIED TO AHRI410

Optional flange connection for easy connection to stainless steel ductwork

Optional phenolic powder coating for chemical resistance

Valve pressure measurement with analog pressure signal output

High speed fail-safe actuator

5-Laboratory Solutions

For more information visit www.pricecriticalcontrols.com

LABORATORY SOLUTIONS

Price Research Center North (PRCN) is a world-class testing and demonstration laboratory located in Winnipeg, Canada.

The 28,000 square foot facility includes multiple sound measurement and testing spaces, along with the most advanced radiant testing chamber in North America. In addition, the research center boasts four rooms dedicated to the advancement and understanding of hospital and laboratory applications.

The Interactive Venturi Valve Display Wall allows PRCN visitors to see how venturi valves respond to real-world conditions such as poor inlet or outlet connections, system pressure changes and the incorporation of noise control technology.

The Patient Isolation Room effectively demonstrates how different valve configurations can impact system operation while also facilitating the comparison of different room pressure control strategies.

With multiple fume hood types, adjustable valve configurations and a full laboratory control system, the Laboratory Performance Demonstration Room helps visitors understand the challenges of maintaining a safe lab environment and how they can be efficiently addressed.

We invite you to visit PRCN today - please contact your local sales representative to arrange for a visit.

For more information visit www.pricecriticalcontrols.com

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