

PRODUCT OVERVIEW

LABORATORY SPACE CONTROLLER (LSC)

The LSC is designed for laboratory applications that require airflow and temperature control using a dedicated system that ties into the fume hoods within the space. The digital controller maintains a constant volumetric offset between the supply, general exhaust and fume hood air valves in the VAV system to ensure accurate control of directional airflow. Fume hood controllers are daisy chain wired to the controller and the local network uses Price M-Net for a less than 1 second speed of response between the controllers. A native BACnet MS/TP connection to the BMS means that no gateways or protocol converters are required.



The LSC can tie in a room pressure sensor to monitor the pressure in the space with a local visual and audible alarm option available.

Room temperature and humidity are measured using a Price thermostat mounted in the occupied space. Simple connection to thermostat is provided with plug and play RJ45 cables. Outputs for the LSC for reheat and humidity include binary (24VAC), staged, and analog (0-10VDC).

With Native BACnet MS/TP communication, the LSC can tie into building management systems (BMS). When connected to the network both the space and attached fume hood variables are available for monitoring and control.

Commissioning software allows quick and thorough setup of the LSC system with the ability to generate a printable test report.

Product Features

Laboratory Space Controller (LSC):

- Volumetric control up to 8 supply or general exhaust valves
- System control of up to 16 fume hoods
- Temperature and humidity controls
- High speed flash based microprocessor
- Multi-stage surge protection against voltage transients on 24 VAC input
- Pluggable terminal blocks
- Panel enclosure and valve mount options
- Two level password protected menus
- Service port on thermostat or RPI for use with Linker2 setup software
- Setup Wizard – walk through setup of the LSC when first powered up
- Simple plug and play RJ45 connections to the fume hood controllers, thermostats, and pressure monitors.

SPECIFICATIONS

Input Power: 24 VAC, 50/60 Hz, 15 VA (plus external loads), Class 2

Environmental (operating): 10°C to 50°C (50°F to 122°F), 0% to 95% R.H. (non-condensing)

Environmental (storage): -30°C to 50°C (-22°F to 122°F), 0% to 95% R.H. (non-condensing)

Inputs: 6 Binary inputs: (Configurable for valve pressure status from LMX)

12 Analog inputs: 0-10 VDC inputs (configurable for valve, terminal airflow, or valve pressure from LMX)

2 temperature inputs: 10k type 2 thermistor

Thermostat: RJ-45 connection

Optional pressure sensor: ±25 Pa (0.1 in. wg), accuracy better than 0.2% FS near zero, temperature compensated

Outputs: 2 dry binary outputs rated at 0.2 amps each (maximum 24 VAC/VDC), protected with thermal fuse

3 24 VAC binary outputs rated at 0.2 amps each (maximum 24 VAC/VDC), protected with thermal fuse

6 analog outputs: (10mA maximum, 0-10 VDC), configurable for pressure and alarm outputs, actuator (venturi valve), reheat and humidifier

Indicators: Status LEDs on all I/O

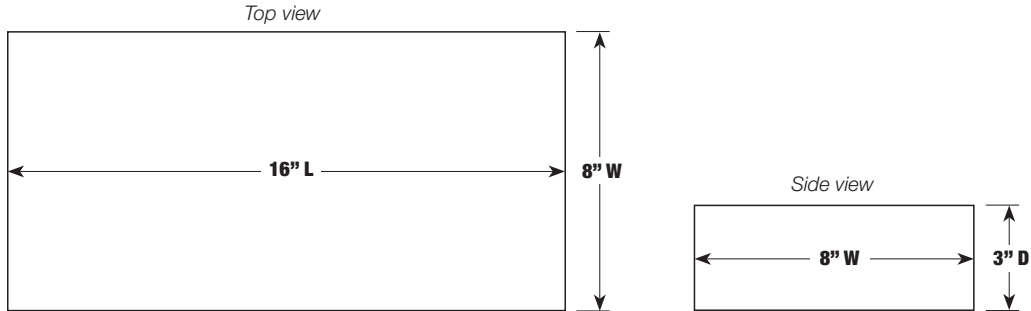
Connections: RJ45, RJ-12, removable terminal blocks.

Communication: Fume hood communication port, RJ-45 connection
Native BACnet MS/TP (BTL Listed)

Specifications subject to change without notice

DIMENSIONAL DATA

Electrical Enclosure: 8"W x 16"L x 3"D Powder Coat White Paint Finish



SELECTION CHART

| | FHC Fume Hood Controller | FHM Fume Hood Monitor | LSC Laboratory Space Controller | TC Tracking Controller | VC Valve Controller |
|--|------------------------------------|---------------------------------|---|----------------------------------|-------------------------------|
| Side wall Sensor Face Velocity Monitoring | X | X | | | |
| Side wall Sensor Face Velocity Control | X | | | | |
| Sash Position Sensor Face Velocity Control | X | | | | |
| Combination Sidewall/Sash Position Face Velocity Control | X | | | | |
| Analog Valve Pressure Output | X | X | | | |
| Volumetric Offset Control | | | X | X | |
| Temperature Control | | | X | X | X |
| Humidity Control | | | X | | |
| Room Pressure Monitor | | | X | | |
| Native BACnet | | | X | X | X |

PRODUCT CODE

LSC-RPI-RPS1-BAC-SENS

| Product | Interface Type | # of Pressure Sensors | Network Type | Thermostat Type |
|--|--|---|--|--|
| LSC - Laboratory Space Controller | RPI - LCD Room Pressure Interface | RPS1 - One Room Pressure Sensor RPS2 - Two Room Pressure Sensors | BAC - Native BACnet MS/TP Network | SENS - T-Stat with Blank Face DIAL - T-Stat with Dial Setpoint LCD - T-Stat with LCD Screen LCDH - T-Stat with LCD Screen and Integrated Humidity Sensor MOT - T-Stat with LCD Screen and Motion Sensor |