

New Integration Solutions

- **Room Integrator (RMI)**

- Low cost integration only product
- Room networking and protocol translation
- Integrate one room at a time
- Webserver serving diagnostic displays



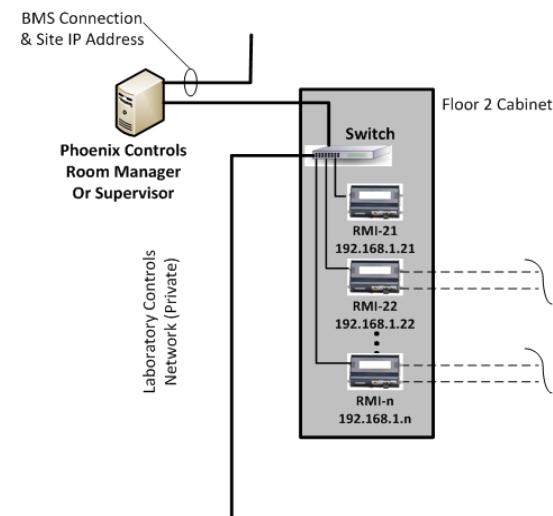
- **Room Controller (RMC)**

- Networking, Integration and Control in one cost effective solution
- Same features as RMI
- Plug in IO Modules

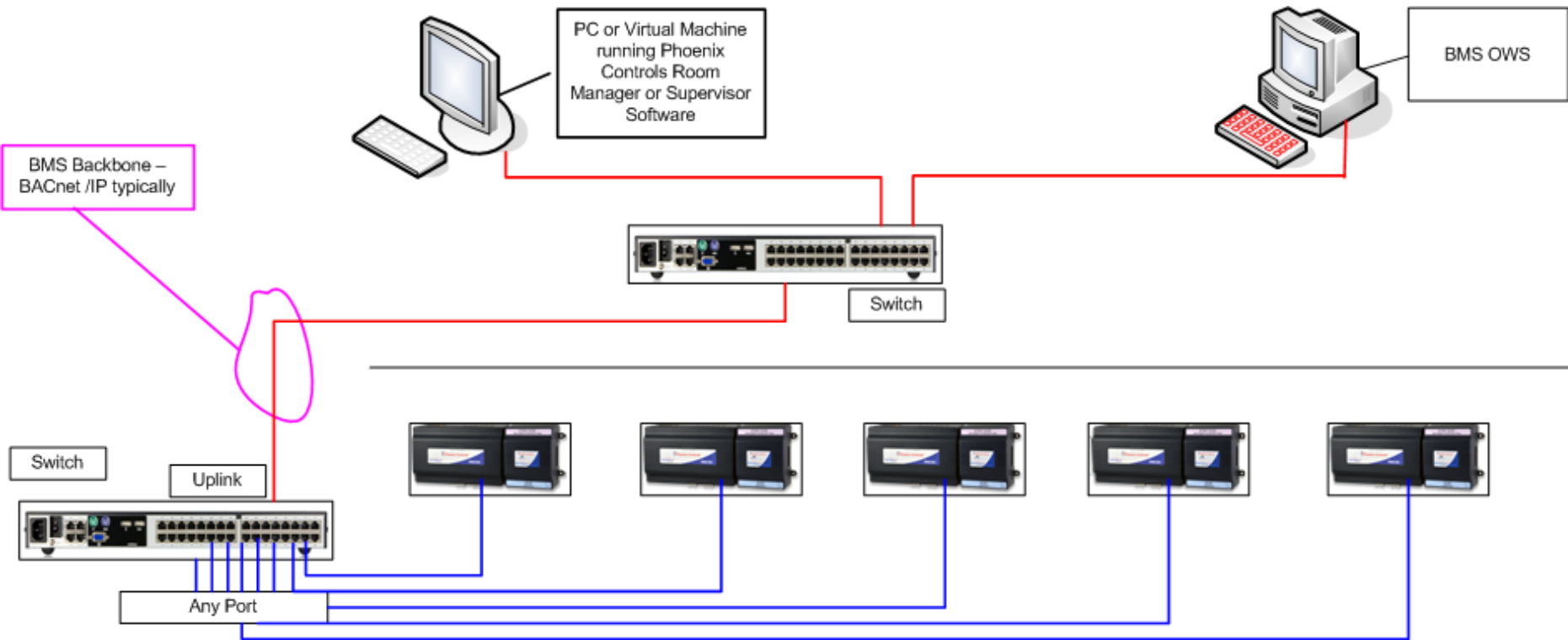


- **Room Manager Software (RMM)**

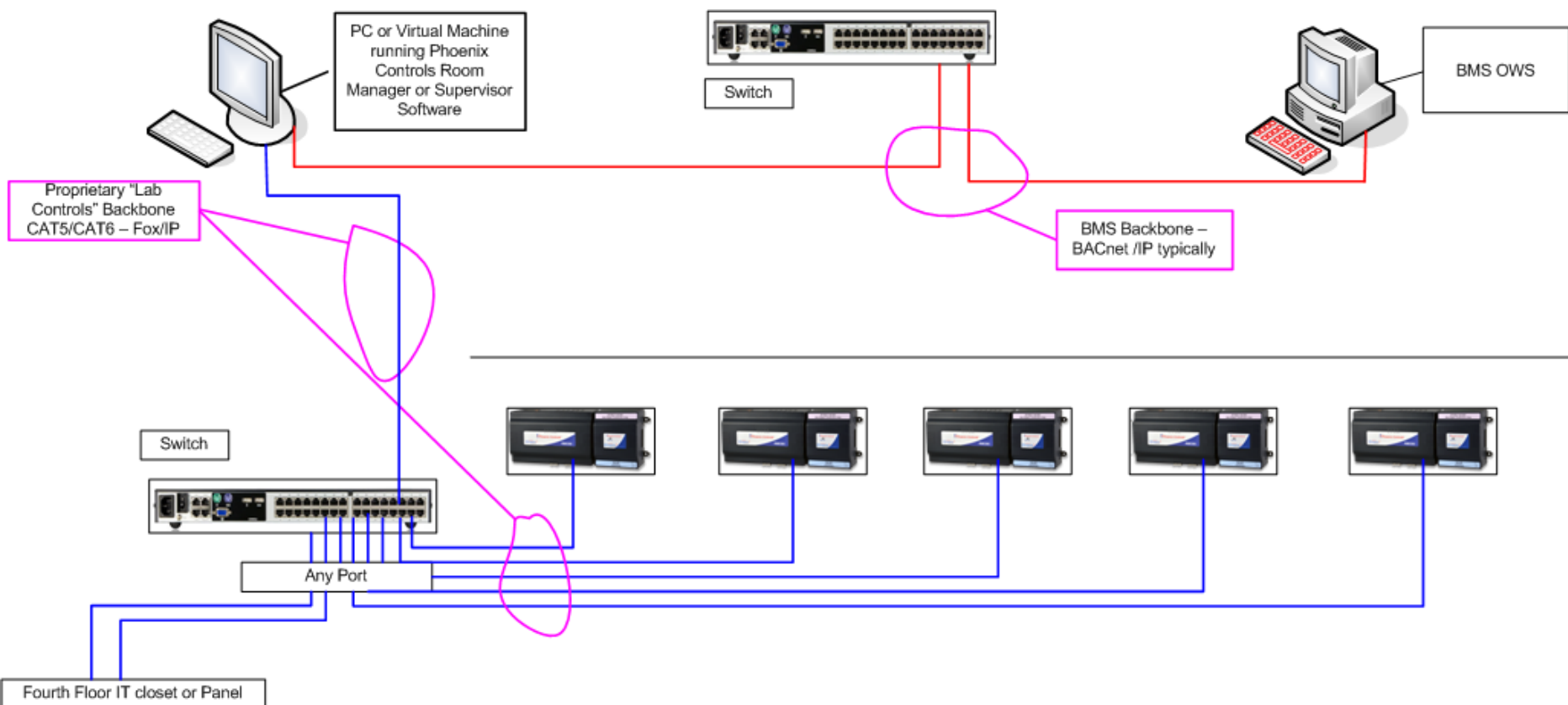
- Functionally replaces MacroServer
- Supports single IP drop architecture
- Local backups
- Remote access point





Distributed Integration




Centralized Integration



Diagnostic Displays


DIAGNOSTICS PAGE
ADMIN 

DIAGNOSTICS PAGE
Summary
7:03 PM | March 21, 2015

TngBigLab 

RMI/RMC Health
LON Health
Device Health

☐ Hide healthy devices

Device Name	Room Name	Application	Online	Error	Alarm
GEX_LF_6	Lab6	SccLabFull			
MAV_Main_6	Lab6	MavAtc			
MAV_BSTR_6	Lab6	BstrTrk			
Gex_6	Lab6	Gex			
Hood_6	Lab6	Hood			
GEX_LF_5	Lab5	SccLabFull			
Hood_5	Lab5	Hood			
MAV_Main_5	Lab5	MavAtc			

Details for MAV_Main_6

Serial Number

Errors

Name

Alarm Status Sensor Failed


Phx Snsr Err U I3 Status


Alarms

Name

Sensor Failed

Flow Management

LAB VERIFICATION

ADMIN

LAB VERIFICATIONCreate/Open TaskSelect Test ZoneRead FlowsHood/BoosterT-stat SetupVisualReport

TngBigLab - Lab6

Flow Data UnitCFMRead Interval5 seconds



NOTE:138861 marks invalid flow valueRead FlowStop Read

Click on Demand Column, then click Read Flow. Click Stop Read when done.

Flow Type	Device Name	Control Function	SP/PV	Cooling Demand	Heating Demand	OccVent Demand	UnOccVent Demand	Hood Demand
TOTAL ZONE SUP	GEX_LF_6		SP	511	1015	1608	1740	1740
			PV	511	1015	1608	1740	1740
TOTAL ZONE EXH	GEX_LF_6		SP	375	903	1466	1606	1606
			PV	375	903	1466	1606	1606
ZONE OFFSET	GEX_LF_6		SP	125	125	125	125	125
			PV	121	91	142	133	133
GEX	GEX_LF_6	ZB.E.O.	SP	??	354	640	712	712

PreviousNext

Flow Adjustment

TEST AND BALANCE | MANUAL OVERRIDE | FLOW MANAGEMENTADMIN 

FLOW MANAGEMENTSelect Test ZoneAdjust Flow11:56 AM | May 5, 2015

SELECT VALVE

Tracel_TrackingPair

☐ Tracel TP(Supply & Exhaust)

COMMAND FLOW

Enter a flow value in the override box below and click Override.Click relinquish when done reading the flow

Flow Feedback:993

High Flow Override:1000

OverrideRelinquish

Flow Feedback:208

Low Flow Override:200

OverrideRelinquish

ADJUST FLOW

To adjust a single value in the flow curve, enter the measured value in the Measured Flow box and click Adjust Flow

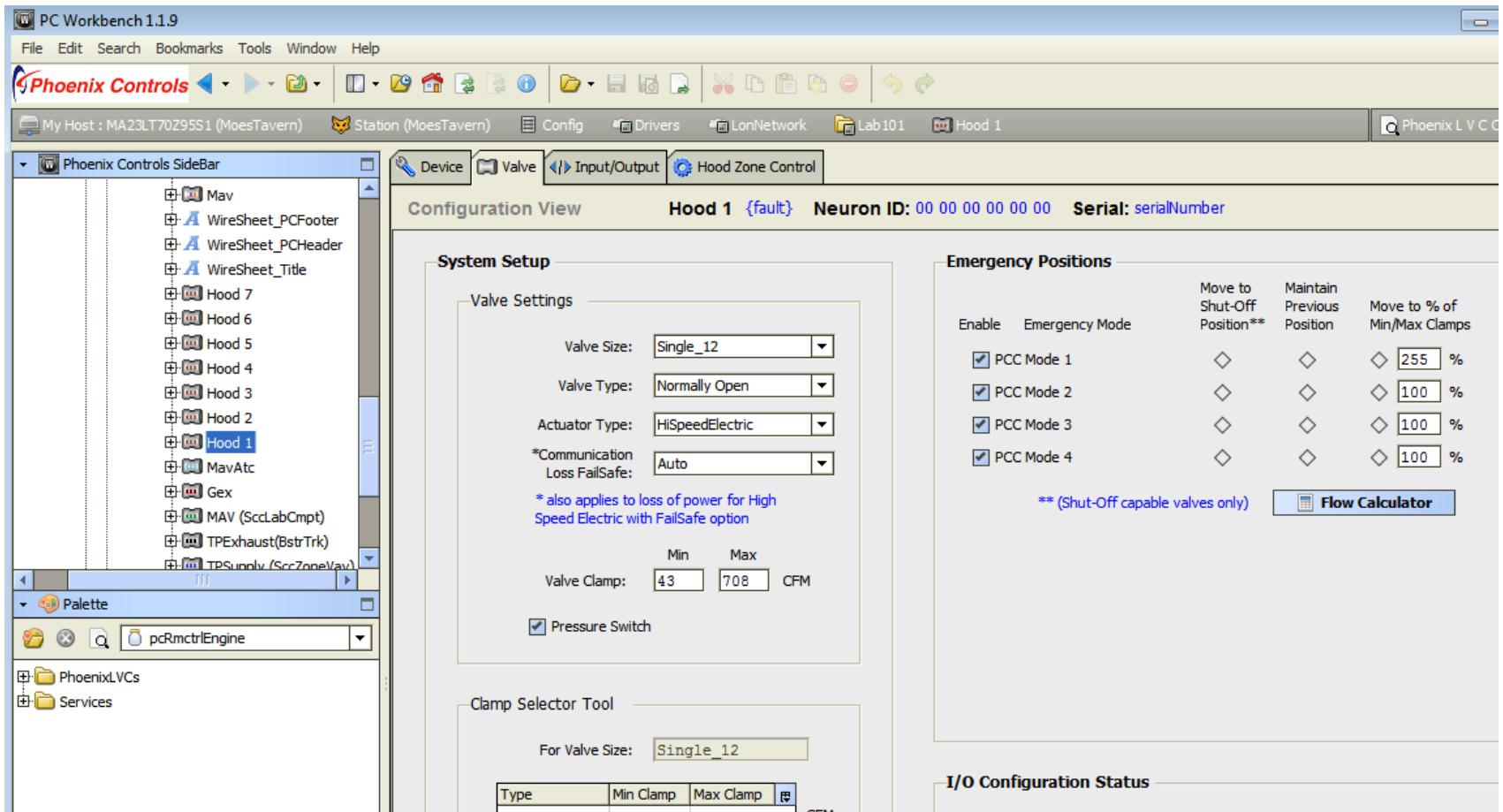
☒ Single Point☐ Multiple Point

Measured Flow: CFM

Adjust Flow

PreviousNext

Workbench Configuration and Diagnostics



Notes on Migration

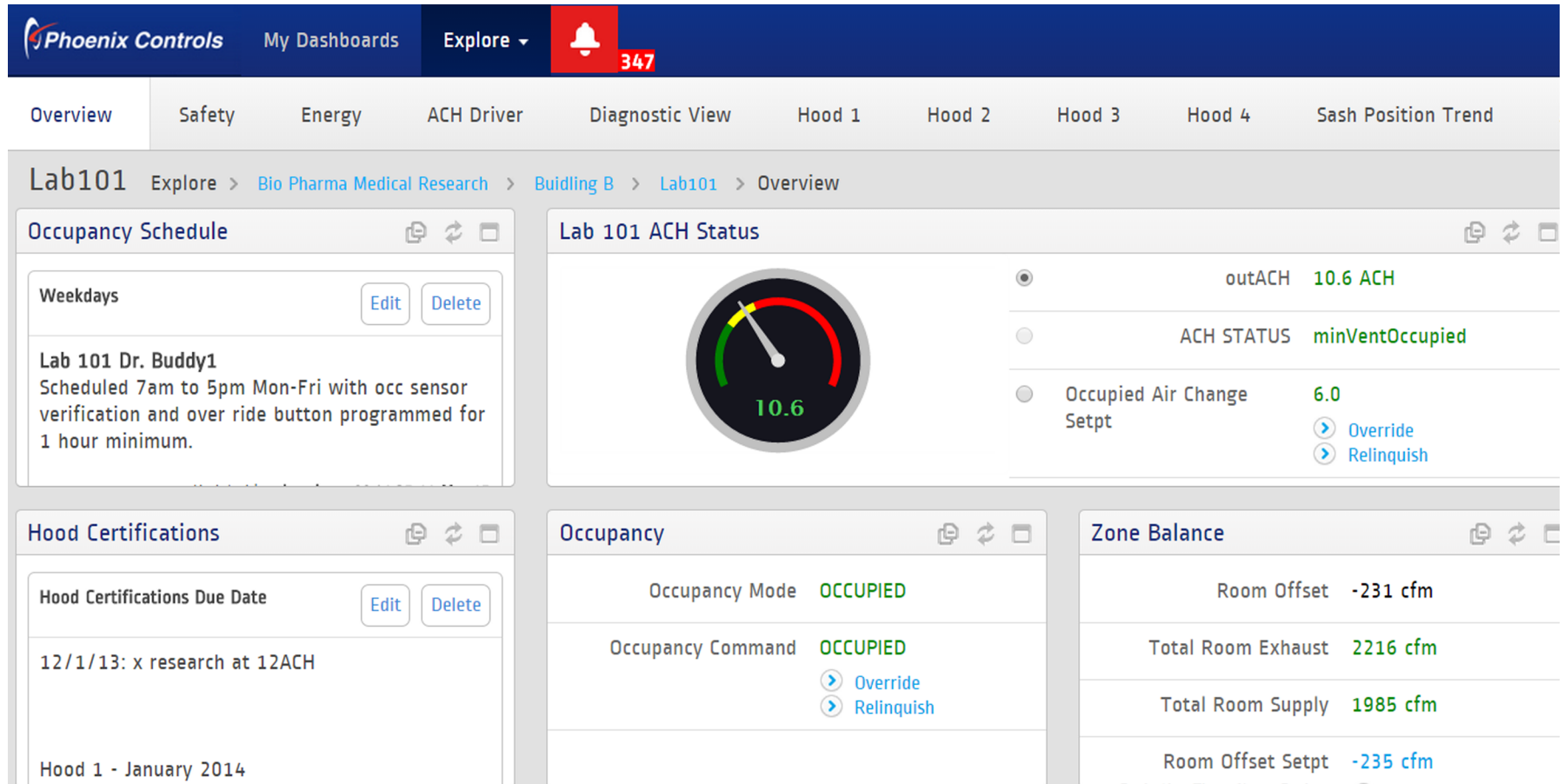
- MicroServer
 - Reuse existing FTT-10 wiring in the room
 - Can remove / bypass the Lon routers
 - Run standard CAT 5/6 Ethernet from RMI / RMC to switch (provided by others)
 - Multiple protocols available for building integration
- MacroServer
 - Reuse existing FTT-10 wiring in the room
 - Remove TP-1250 wiring
 - Run standard CAT 5/6 Ethernet from RMI / RMC to switch (provided by others)
 - One NIC on Room Controller computer to RMI / RMC subnet, the other to building network
 - BACnet over Ethernet integration
- C1 to C2 retrofit
 - Replace CCU100-PEM with RMC if implementing temp and reheat control and do not want to rewire sensors and other equipment
 - Replace CCU100 with RMI
 - Reuse existing room wiring and run standard Ethernet cable to switch

New Front End Solutions

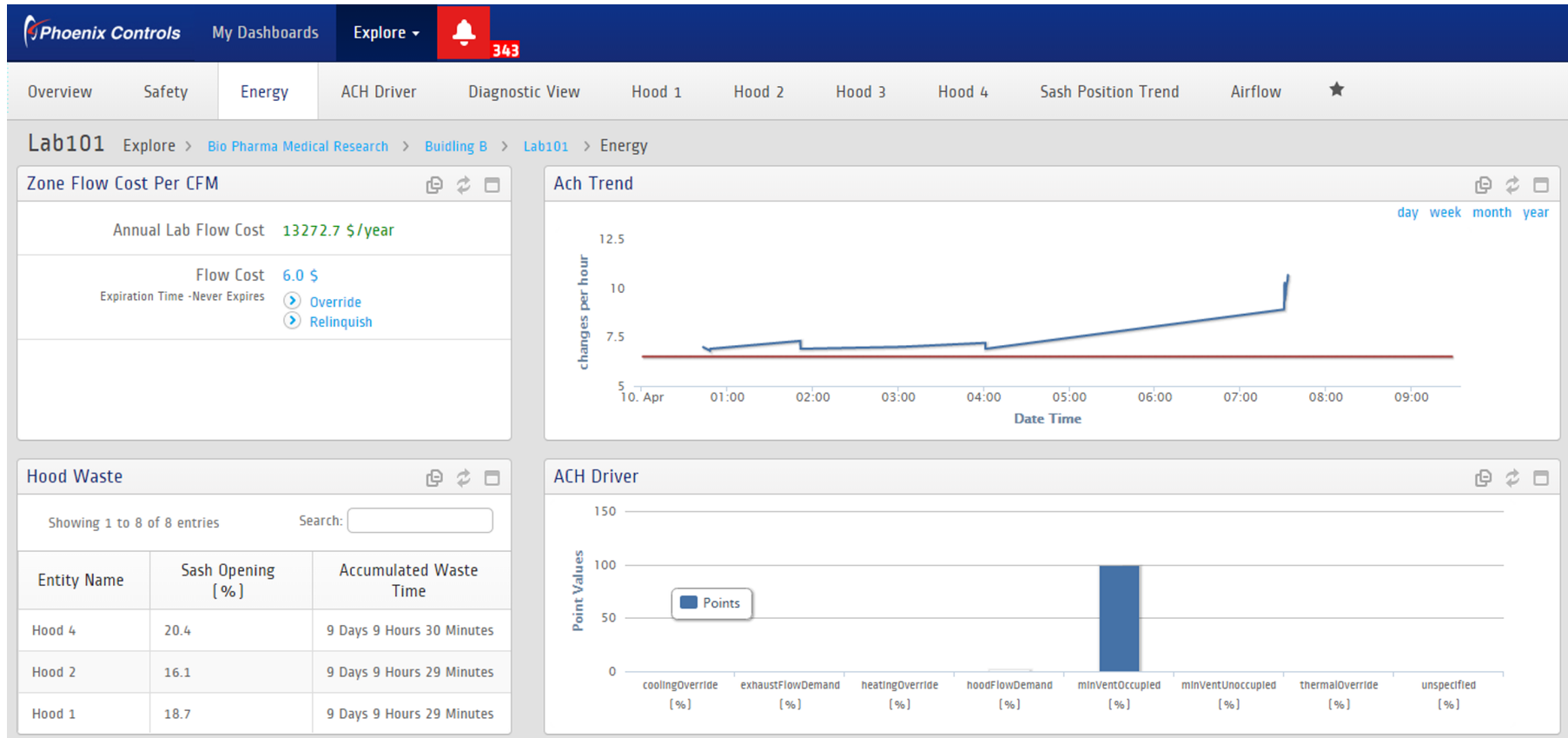
- Supervisor
 - Software solution
 - For medium and large (greater than 300 points to be viewed) projects
 - Offers long term data trending and archiving
 - Lon-based applications (connect to Micro/MacroServers, RMI/RMC/RMM)

- Portal
 - Hardware based solution
 - Small projects (less than 300 points to be viewed)
 - Short term trending
 - Front end solution for BACnet MS/TP applications

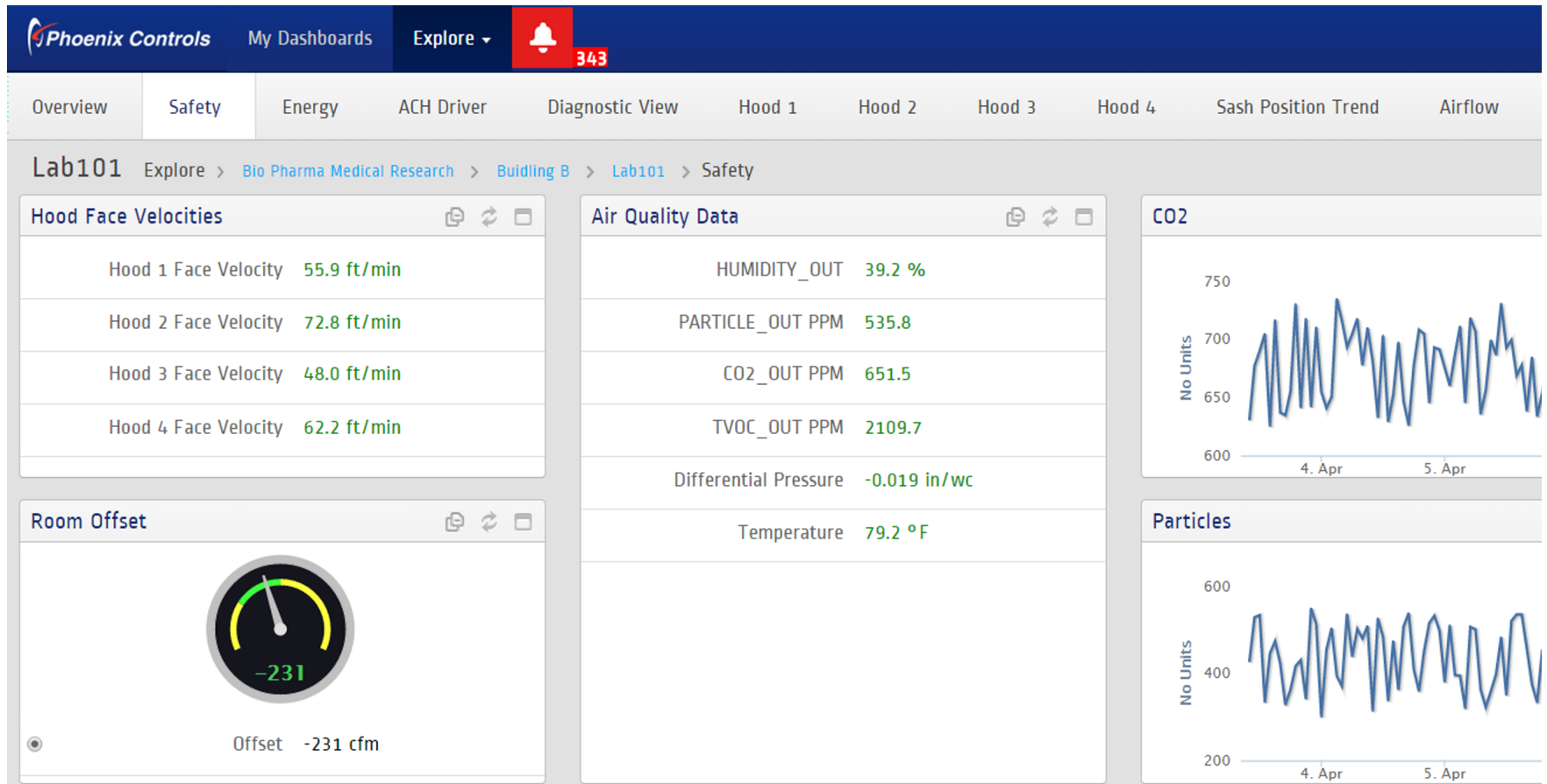
Dashboards



Identify Poor Sash Management



Monitor Third Party Devices



Troubleshoot Problems Quickly

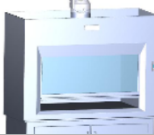
Phoenix Controls My Dashboards Explore ▾

Search Welcome phoenix

Lab 101 Overview Lab 101 Energy Lab 101 Safety Lab 101 Hood Status **Hood 1** Hood 2 Hood 3 Hood 4 General Exhaust Supply ★ 1:28 PM March 22, 2013

Lab 101 Explore > Bio-Pharma Campus View > BioPharmaBldgB > Floor 1 > Lab 101 > Hood 1

Hood Info




Hood Flow: 87 cfm
Sash Opening: 100.3 %
Face Velocity: 17 ft/min

Certification History

2011 Cert	Edit Delete
John Smith	
Updated by phoenix on 09:00:39 23-Jan-13	
2012 Cert	Edit Delete
Peter Johnson	
Updated by phoenix on 09:00:51 23-Jan-13	
Add Notes	

Alarm Status

Show All

 **Jam Alarm**
HAV_1

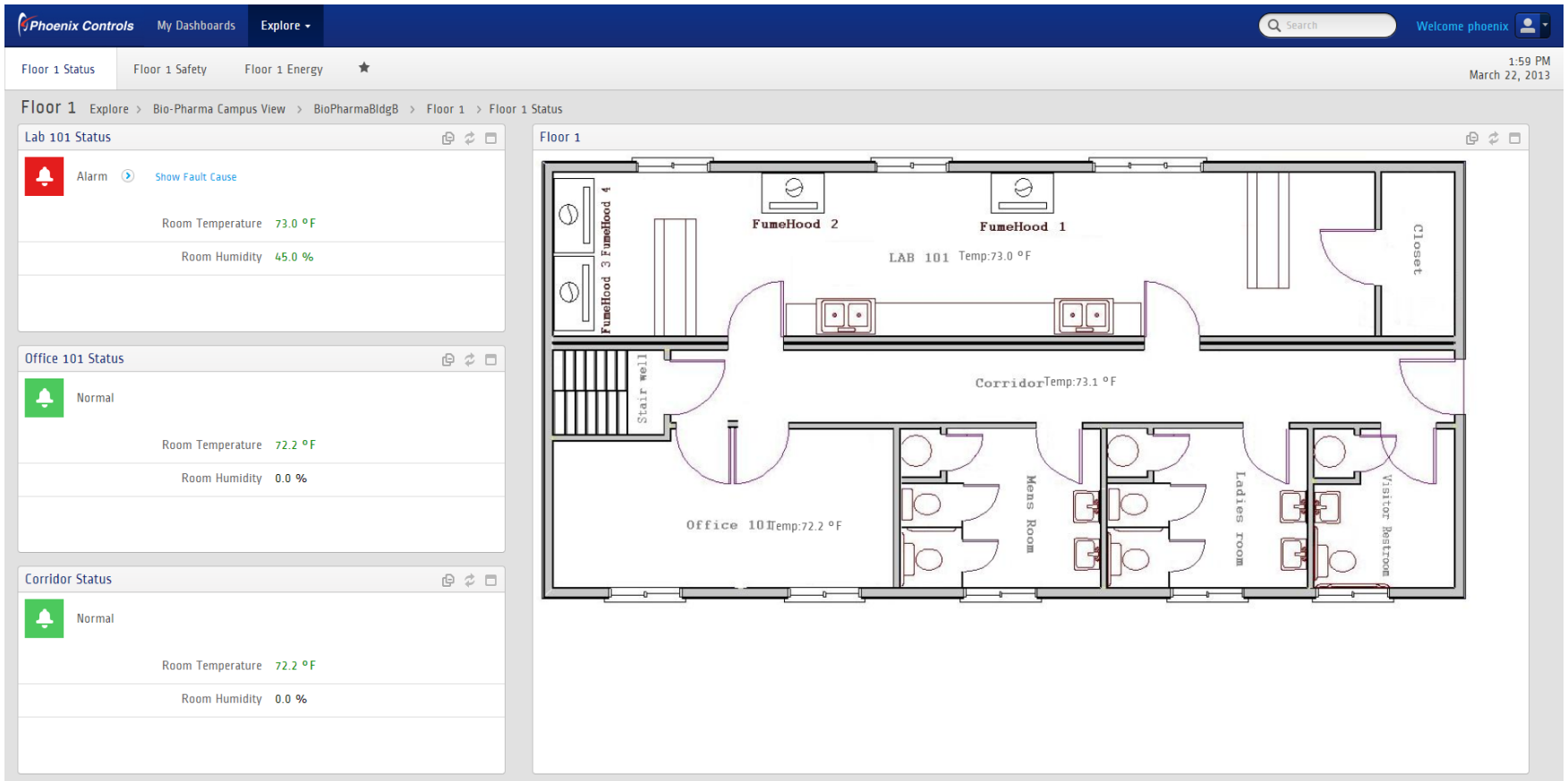
Point Viewer

Show 10 entries Showing 1 to 10 of 17 entries Search:

Point Name	Value	Status	Units	Active
AI_FLOW_CALC_HOODOPTIMAL				
AI_FLOW_CALC_HOODWASTE				
AI_FLOW_SP_VLV	297	{Normal}	cubic feet per minute	
AI_FLOW_VLV	87	{Normal}	cubic feet per minute	
AI_OTH_FLOWCOST				
AI_PERCENT_SASHOPENING	100.3	{Normal}	percent	
AI_SPEED_FV	17	{Alarm}	feet per minute	
AI_SPEED_SP_FV	60	{Stale}	feet per minute	
BI_ALARM_COMFAILURE	inactive	{Normal}		
BI_ALARM_FLOW	inactive	{Normal}		

First Previous 1 2 Next Last

BMS-like Views




View Touch Screen Room Monitor

- 7" capacitive touch screen display
- Rated for IP54 environments
- BACnet MS/TP or Lon
- On screen configuration
- Touch navigation
- "Tile" screen layout
- Single or multiple rooms



Instinctive Alarming

- Full screen visual and audible alarms
- Two-tap to acknowledge
- Alarms nest in tile after acknowledge

Offset	ACH	Occupancy
-150 CFM	13.0	Occupied
Humidity	 Temperature	Pressure
45%	71.5°F	-.025 in wc

Customizable Alarming

- Local alarming
- Customizable by tile or by point
- Audio volume control and mute

 **Custom Alarm**

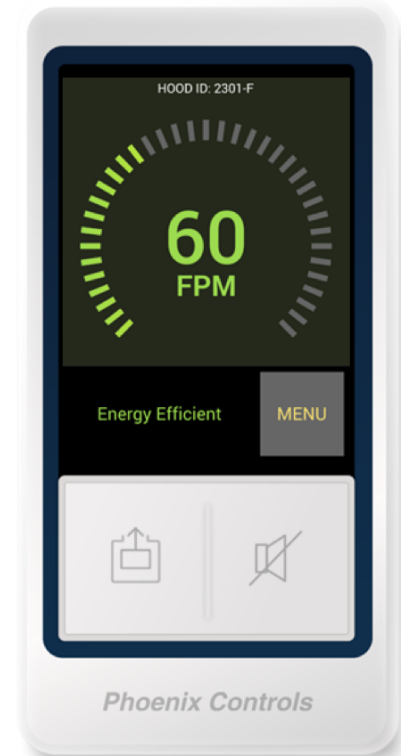
Room 1 Temp	105.0°F 40°F/90°F
[Point Two Title Here]	Occupied
[Point Three Title Here]	-150 CFM -120 CFM/-90 CFM
Room Four Pressure	1.23456 in wc 1.23457 in wc/2.345678 in wc

tap to acknowledge

[Alarm Custom text line 1 associated with this tile]
[Alarm Custom text line 2 associated with this tile]

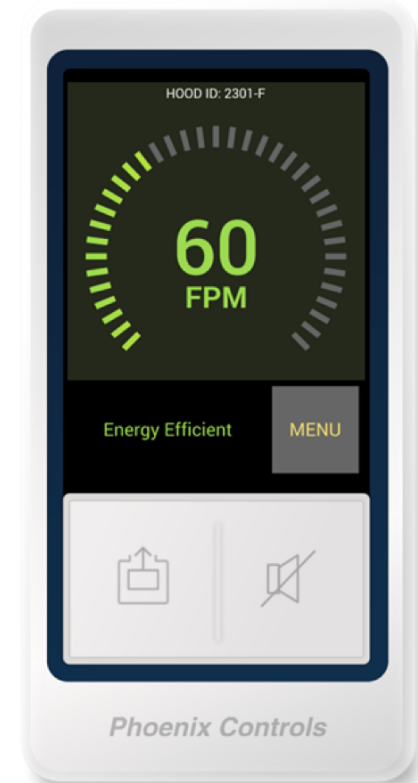
Three New Fume Hood Displays

- Sentry S
 - Functionally replaces FHM430
 - When safety is the only concern
- Sentry SV
 - Same as S but also calculates face velocity
- Sentry SE
 - Functionally replaces FHM631
 - Safety and energy savings are priorities

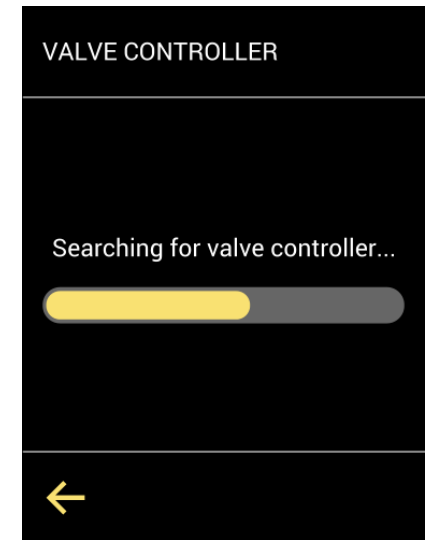
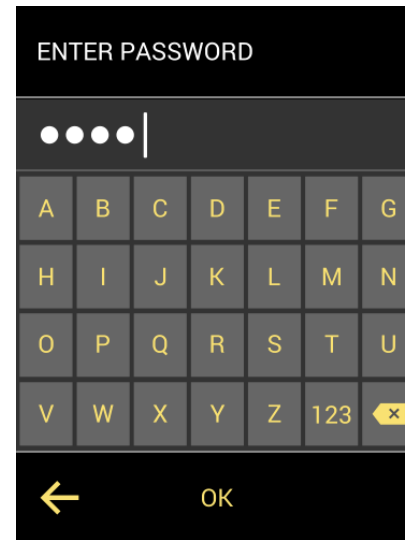
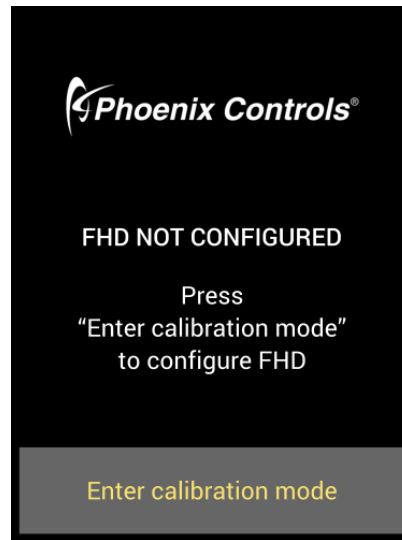
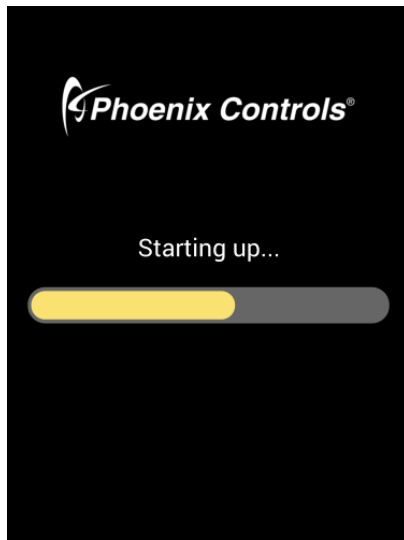


What's New

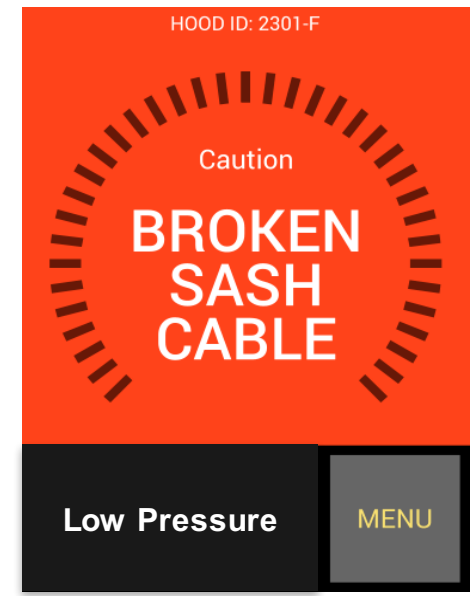
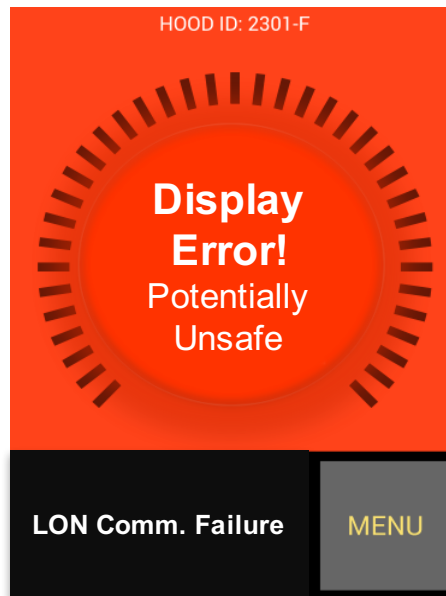
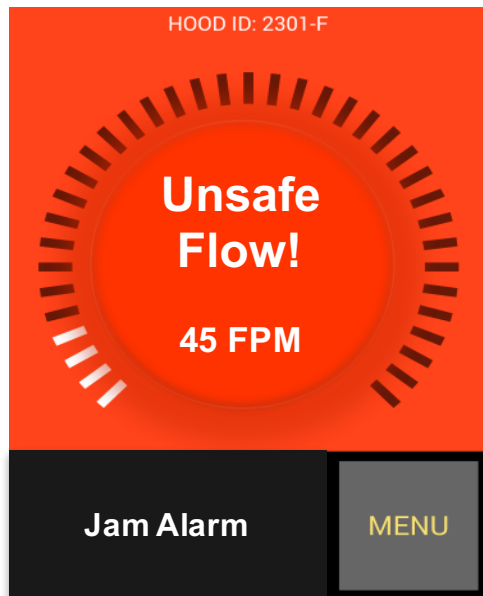
- Bright, touch screen display
- Much smaller footprint
- Energy waste indicator
- Custom user messages
- Daily use with stop watch & timer
- On the Lon network
- Easier wiring via hub
- Optional sidewall sensor



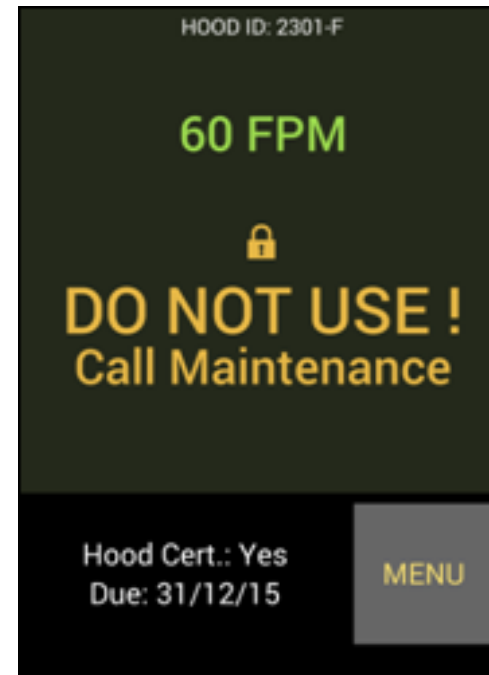
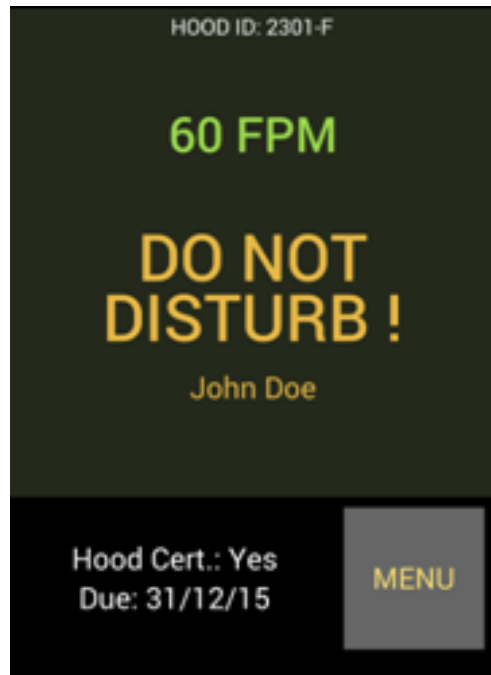
Touch Configuration



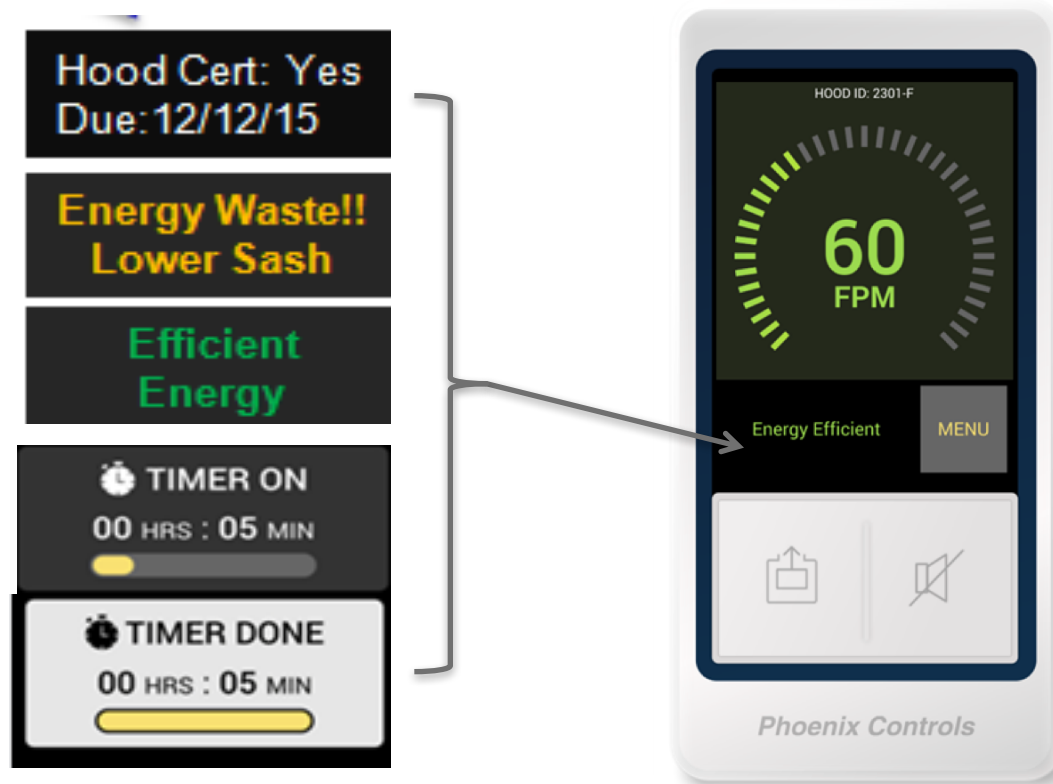
Intuitive Alarming



Message Banner

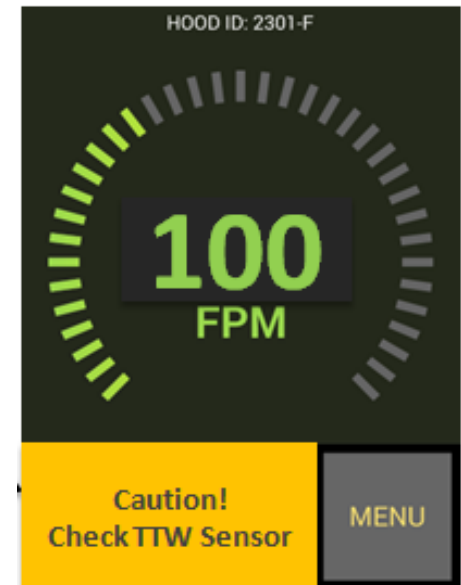


More Information



Side Wall (TTW) Sensing I/O Option

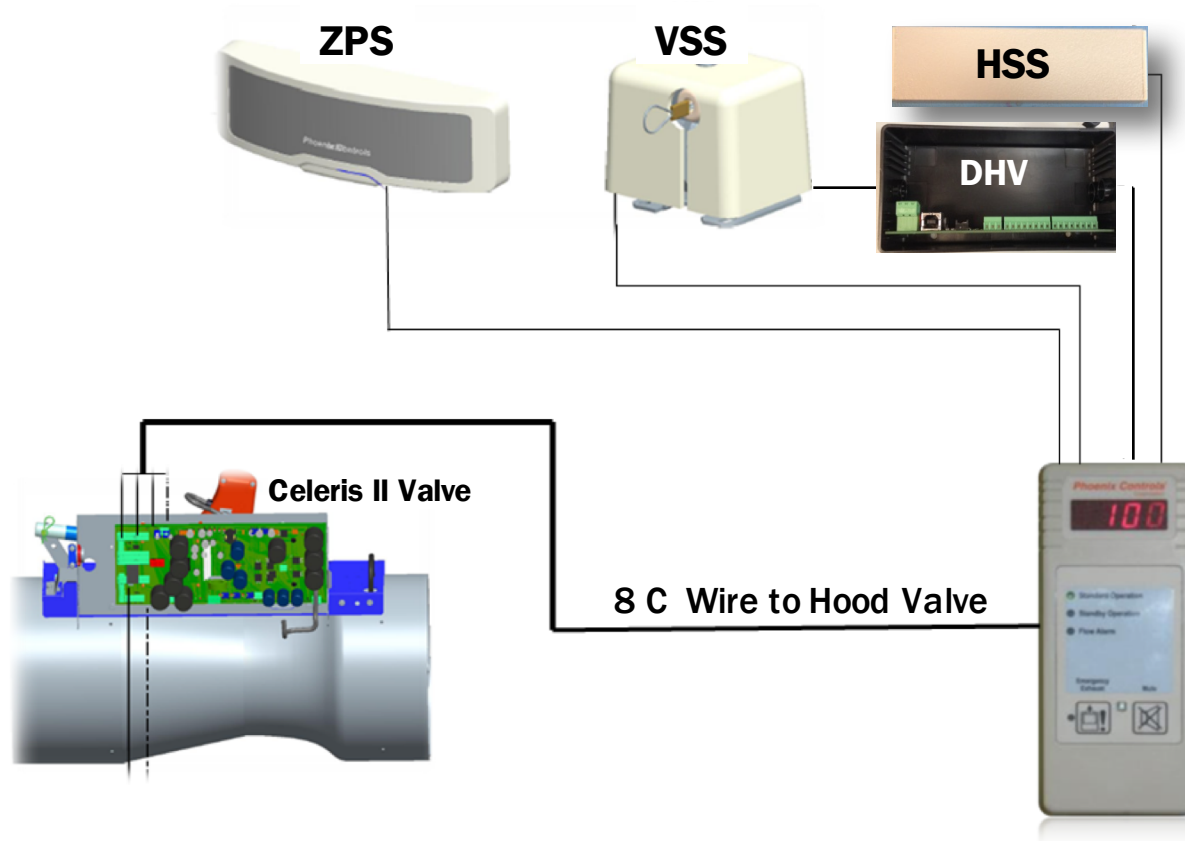
- Available on all three models
- Reference only (0-10 volts input)
- Wire third party sensor to available 0-10v input on valve
- Does not control valve
- Sash position continues to control flow
- Drift Alarm: when calculated face velocity and side wall sensor reading vary by a configurable percent difference
- Optional and selectable in configuration settings



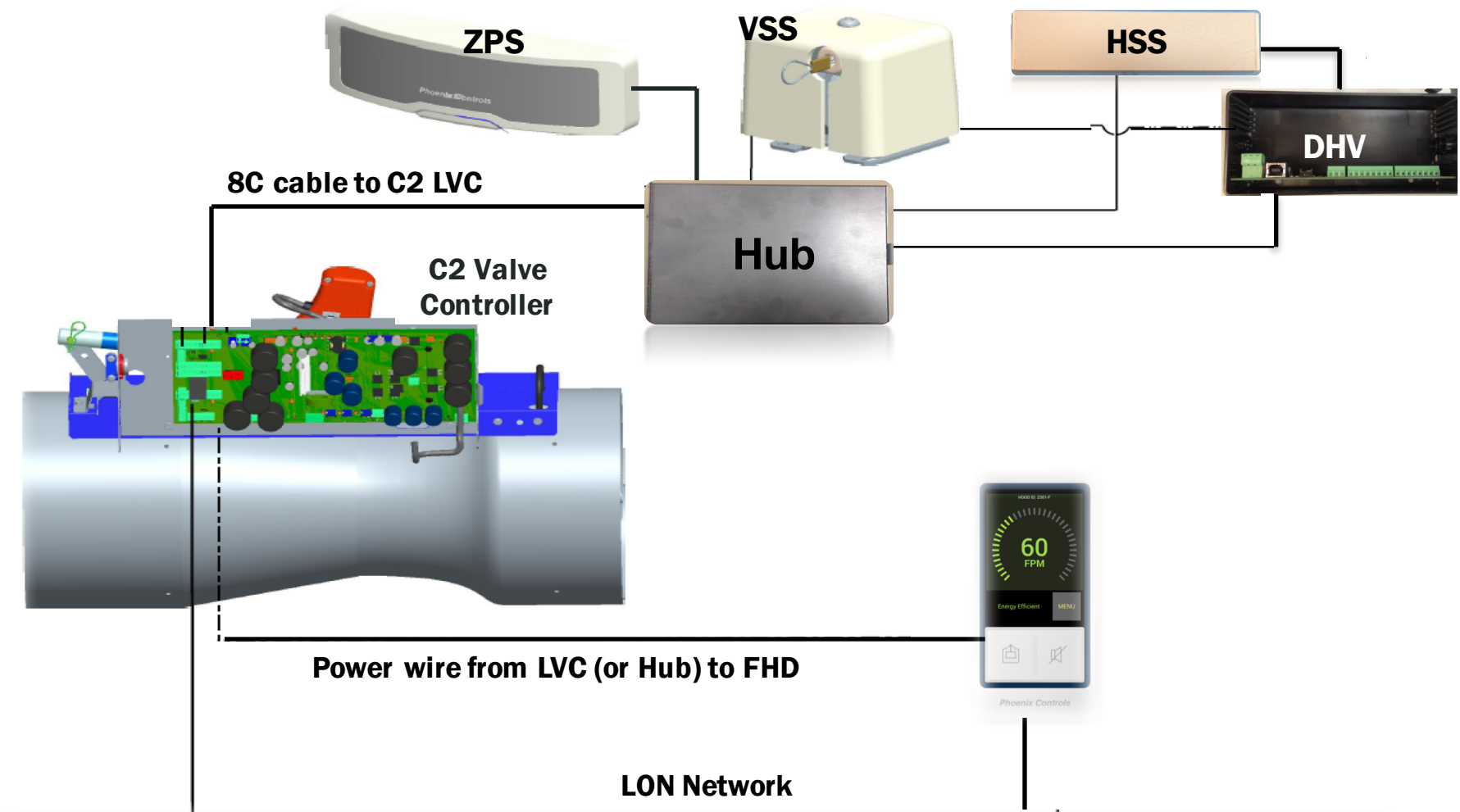
Summary

Feature	Sentry S	Sentry SV	Sentry SE
Primary / Secondary	Yes	No	No
Displays Face Velocity	No	Yes	Yes
Custom Messaging	Yes	Yes	Yes
Clone Configuration Settings	Yes	Yes	Yes
Energy Savings Monitoring	No	No	Yes
Sidewall Sensor Drift Alarm	Yes	Yes	Yes

Legacy FHM Wiring Layout



Sentry Wiring Layout



The Vantage value proposition includes:

- More information for more users: facility staff, lab users, IT, administration
- Cost effective front end solutions that offer more value at a significantly lower cost as compared to integration to BMS
- Room and hood displays with modern look and feel
- Lower cost to configure, commission, support
- Shorter learning curve
- Reduce time and effort to diagnose equipment issues