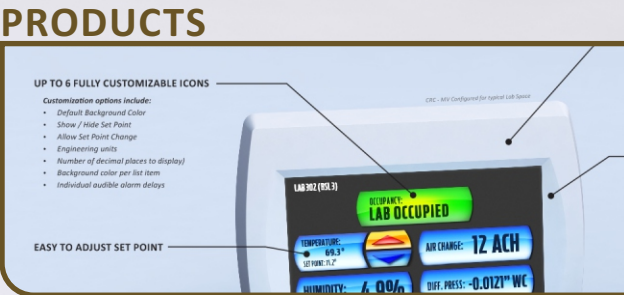
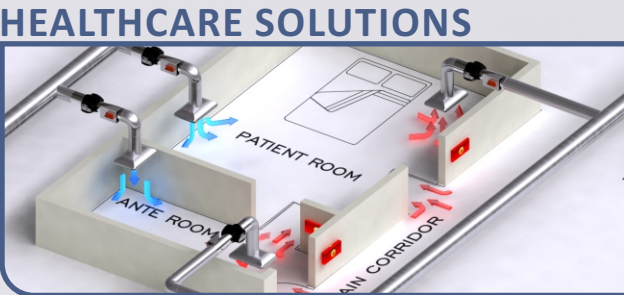
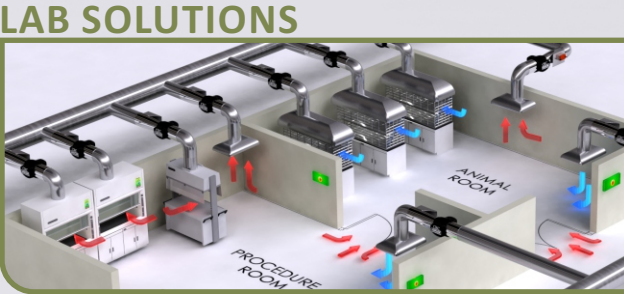


CRITICAL ROOM CONTROL

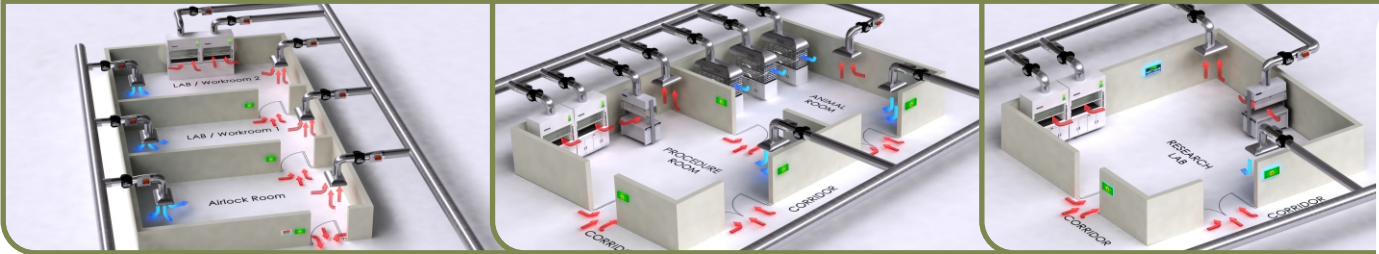
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OCTOBER 2012



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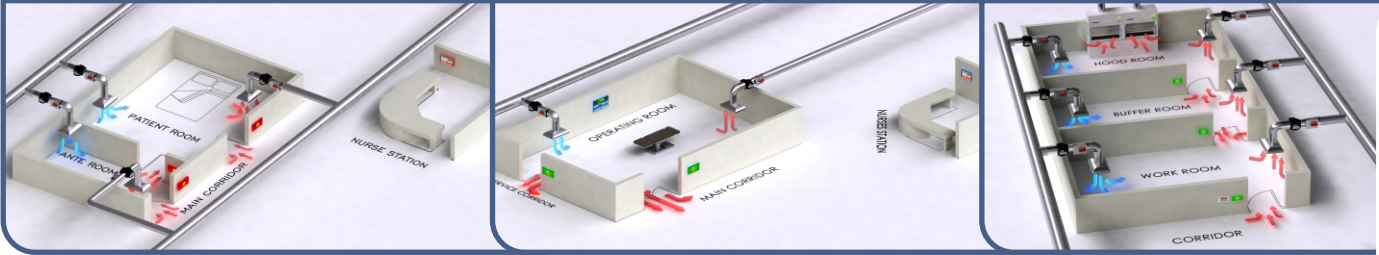
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CRC PRODUCTS



# CASCADED LABS / BIO-CONTAINMENT LABS (BSL)

Environments such as wet chemistry and biological research labs require a high performance ventilation system to ensure safe, stable, and reliable working conditions. With a true closed loop control strategy, CRC systems continually verify that safe operating conditions are being met. Superior lab control, coupled with CRC's intuitive touch screen interface device, not only alerts occupants of potential dangerous conditions, but also allows local changes to environmental conditions. Bio-containment facility solutions are designed to deliver safe, consistent, and stable environments where performance is vital. Proper ventilation and a reliable working environment are paramount for both safety and quality research results.

- Fast, accurate, quiet and reliable room ventilation, temperature, humidity and pressure control
- Stable cascaded lab pressure relationships
- Captures and contains fumes ensuring occupant safety
- Energy efficient control sequences
- Safe closed loop control with true variable feedback
- Local access to critical information at the touch of a finger
- Fully automated room sequencing and safety procedures
- Simple to navigate safety indication and alarming
- Long term reliable control with no scheduled maintenance
- Five unique modes developed specifically for lab space

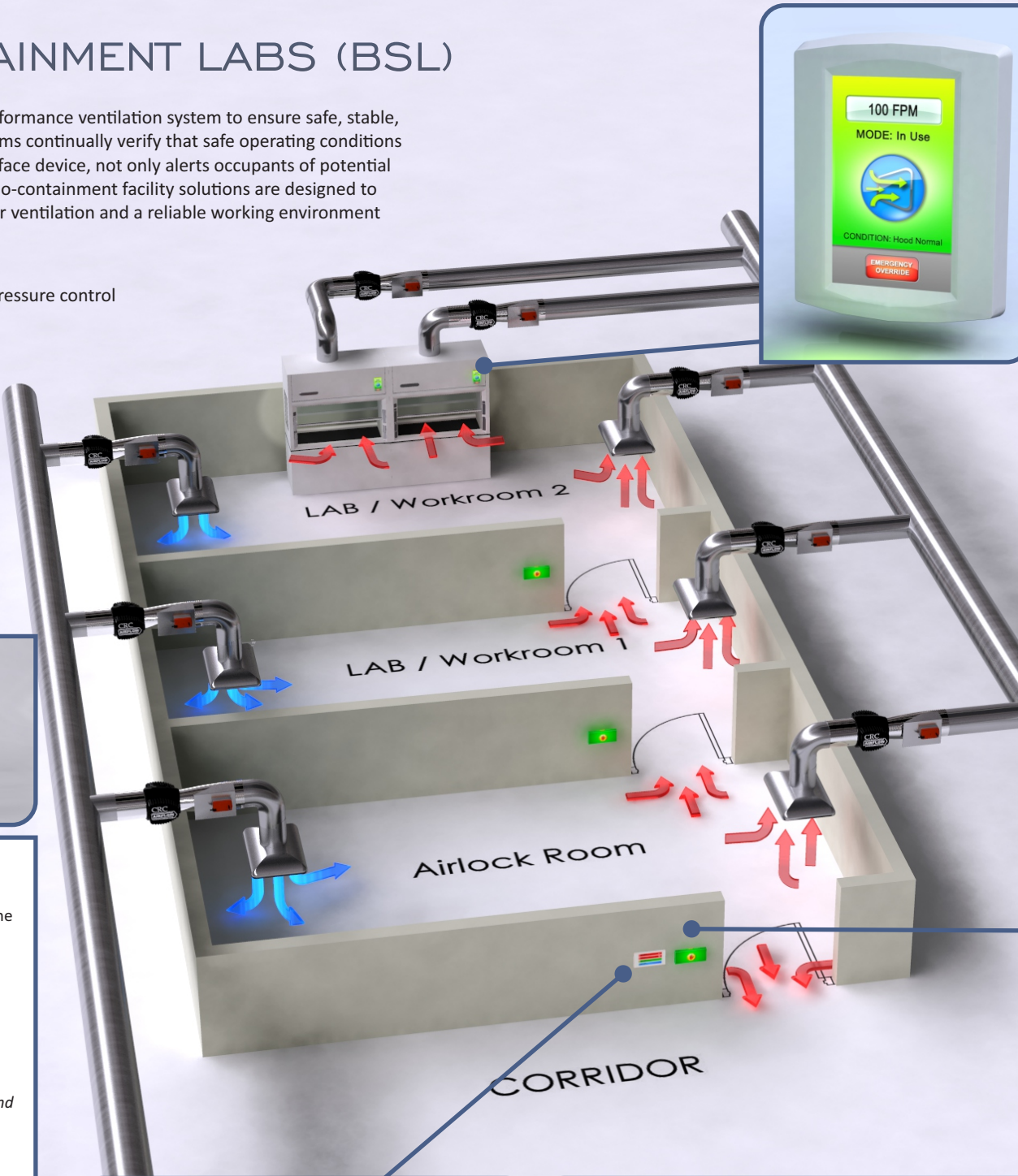


### CLOSED LOOP VALVES:

CRC-CLV

In order to ensure that safe operating conditions are being met, it is critical to measure the output that is being controlled. Our unique closed loop venturi valve provides long term reliability, unmatched accuracy, and true airflow measurement.

- Closed loop control
- True industrial grade air flow measurement
- Industry's lowest energy requirements
- Impervious to lint, dirt and dust
- No minimum static pressure requirements
- Confirmation of desired set point
- Fast acting and failsafe
- No scheduled maintenance
- Accurate to  $\pm 5\%$  of flow
- Ultra low pressure drop
- No required straight duct runs
- 10 to 1 turndown
- Aluminum, steel, stainless steel, and coated construction
- Mount in any orientation



### Fume Hood Monitor / Controller:

CRC-FPM / CRC - FPC

The Fume Hood Controller (CRC-FHC) is designed to monitor and control a single fume hood where proper flow is vital.

- Monitor and control fume hood face velocity or volume
- Fast, accurate, stable and reliable control of fume hood face velocity
- Full color touch screen clearly indicates fume hood condition and alarms
- Supports constant volume or variable volume hoods
- Supports direct sidewall, vertical sash, horizontal sash and combination sash sensing
- Closed loop control strategy with true variable feedback
- Energy saving sequencing and control logic
- Can operate as a standalone controller or part of a CRC complete lab solution
- Supports Imperial and Metric readouts
- Seamless integration with CRC lab control system or BMS
- Onboard BACnet MS/TP Communications

### Lab Pressure Monitor / Controller:

CRC-LPM / CRC-LPC

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status and current pressure readings.

- Monitor / control up to two rooms with one controller
- 5 fully customizable modes
- Automated room sequencing and changeover
- Dual password protection
- Displays current value, alarm, and set point adjustment of up to 8 points
- Best in class industrial grade dead ended direct pressure measurement
- Onboard BACnet MS/TP Communications
- I/O and Network diagnostic functions

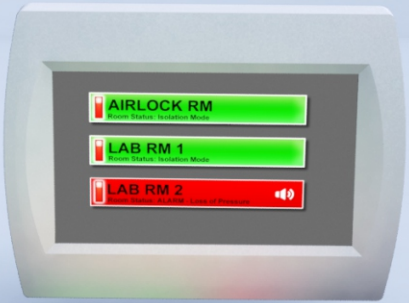


### Multiple Room Monitor:

CRC-MRM

Critical Room Control's Multiple Room Monitor is an advanced compact display module that continuously monitors the occupancy and alarm status of up to four (4) individual rooms via hardwire or network connection. The CRC-MRM also allows the remote monitoring of five additional environmental points per room (20 points total).

- Monitors up to 4 rooms
- Displays and alarms up to five environmental points for each lab space (20 total)
- Seamless integration with the CRC system and BAS
- Clearly indicates any hazardous conditions within suite of lab spaces before entering suite
- In addition to the five (5) data elements (points), each room has an independent overall status with audible and visual alarm





# VIVARIUMS / ANIMAL HOLDING ROOMS

Animal room solutions are designed to deliver a consistent, stable, and safe environment for research animals. Maintaining a proper living environment is critical to quality scientific research. Successful research and testing can be directly linked to accurate ventilation and climate control within the testing population. Critical Room Control provides **complete turnkey systems that define best practices** and include intuitive user interfaces that clearly indicate current status while automating proper space use.

Critical Room Control's Vivarium systems offer:

- Fast, accurate, quiet, and reliable room temperature, humidity and pressure control
- Local access for research staff of critical information at the touch of a finger
- Fully automated room sequencing
- Simple to navigate safety indication and alarming
- Safe closed loop control with true variable feedback
- Energy efficient control sequences
- Long term reliable control with no scheduled maintenance
- Improved user experience with clear intuitive user interfaces
- Single source responsibility for critical improved research outcomes



## CLOSED LOOP VALVES:

CRC-CLV

In order to ensure that safe operating conditions are being met, it is critical to measure the output that is being controlled. Our unique closed loop venturi valve provides long term reliability, unmatched accuracy, and true airflow measurement.

- Closed loop control
- True industrial grade air flow measurement
- Industry lowest energy requirements
- Impervious to lint, dirt, dust, animal hair and dander
- Ultra low pressure drop
- Confirmation of desired set point
- Fast acting and failsafe
- No scheduled maintenance
- Accurate to  $\pm 5\%$  of flow
- No minimum static pressure requirements
- No required straight duct runs
- 10 to 1 turndown
- Aluminum, steel, stainless steel, and coated construction
- Mount in any orientation



## Fume Hood Monitor / Controller:

CRC-FPM / CRC - FPC

The Fume Hood Controller (CRC-FHC) is designed to monitor and control a single fume hood where proper flow is vital.

- Monitor and control fume hood face velocity or volume
- Fast, accurate, stable and reliable control of fume hood face velocity
- Full color touch screen clearly indicates fume hood condition and alarms
- Supports constant volume or variable volume hoods
- Supports direct sidewall, vertical sash, horizontal sash and combination sash sensing
- Closed loop control strategy with true variable feedback
- Energy saving sequencing and control logic
- Can operate as a standalone controller or part of a CRC complete lab solution
- Supports Imperial and Metric readouts
- Seamless integration with CRC lab control system or BMS
- Onboard BACnet MS/TP Communications



## Lab Pressure Monitor / Controller:

CRC-LPM / CRC-LPC

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status and pressure readings.

- Monitor / control up to two rooms with one controller
- 5 fully customizable modes
- Automated room sequencing and changeover
- Best in class industrial grade dead ended direct pressure measurement
- Dual password protection
- Displays current value, alarm, and set point adjustment of up to 8 points
- Onboard BACnet MS/TP Communications
- I/O and Network diagnostic functions



# RESEARCH / LABORATORIES

Research facilities must offer users a reliable, efficient, and flexible environment that ensures research integrity. Just like the research work being performed inside the laboratory space the CRC closed loop control strategy verifies actual operating conditions are being met. Our full color LCD touchscreen devices allow researchers quick and easy access to critical environmental information important to their research with a touch of a finger.

Open lab solutions are designed to deliver a consistent and stable environment for performing research. Proper ventilation and a consistent working environment is paramount for both safety and quality research results. Critical Room Control provides **complete turnkey systems that define best practices** and include intuitive user interfaces that clearly indicate current status while automating proper space use.

- Fast, accurate, quiet and reliable room temperature, humidity and pressure control
- Local access for research staff of critical information at the touch of a finger
- Fully automated room sequencing
- Simple to navigate safety indication and alarming
- Safe closed loop control with true variable feedback
- Energy efficient control sequences
- Space management and room turnover automation
- Improved user experience with clear intuitive user interfaces



## Fume Hood Monitor / Controller:

CRC-FPM / CRC - FPC

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- Supports Imperial and Metric readouts
- Seamless integration with CRC lab control system or BMS
- Onboard BACnet MS/TP Communications



## MultiVIEW Monitor:

CRC-MV

The MultiVIEW is an advanced 7" LCD touchscreen display that is designed to be configured for any monitoring or sequencing application. It's core function is to give local access to critical information in an easy to read display. It supports up to six (6) fully configurable graphical icons - allowing the facility user to view and/or make changes to point values, modes, status, set points, and alarms.

- Bright/sunlight readable 7.0" LCD touch screen
- Displays large, easy to read values, set points, room status, modes and alarms
- Supports local and remote audible and visual alarms
- Analog and digital input and outputs for point values, modes or status indicator
- Network for values, modes or status points
- Set point, status and mode networked or hardwired

## CLOSED LOOP VALVES:

CRC-CLV

In order to ensure that safe operating conditions are being met, it is critical to measure the output that is being controlled. Our unique closed loop venturi valve provides long term reliability, unmatched accuracy, and true airflow measurement.

- Closed loop control
- True industrial grade air flow measurement
- Industry's lowest energy requirements
- Impervious to lint, dirt and dust
- No minimum static pressure requirements
- Confirmation of desired set point
- Aluminum, steel, stainless steel, and coated construction
- No scheduled maintenance
- Accurate to  $\pm 5\%$  of flow
- Ultra low pressure drop
- No required straight duct runs
- 10 to 1 turndown
- Fast acting and failsafe
- Mount in any orientation

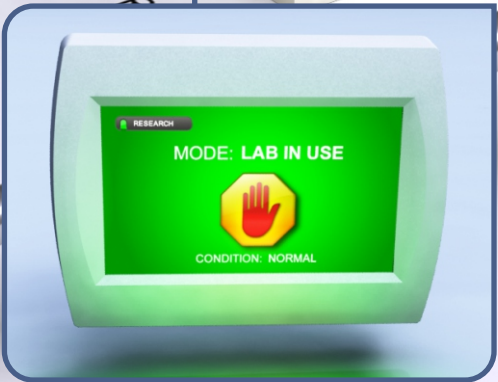


## Lab Pressure Monitor / Controller:

CRC-LPM / CRC - LPC

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status and pressure readings.

- Monitor / control up to two rooms with one controller
- Displays current value, alarm, and set point adjustment of up to 8 points
- Onboard BACnet MS/TP Communications
- 5 fully customizable modes
- Best in class industrial grade dead ended direct pressure measurement
- I/O and Network diagnostic functions
- Dual password protection





# ISOLATION ROOMS

Critical Room Control's innovative approach to designing isolation room solutions combines best in practice environmental control and efficient space management. CRC's unique interface and intuitive design allows staff to spend more time on patient care and less on room management. CRC's unique automated room changeover and sequencing with unequalled clear indication of room conditions dramatically reduces hospital liability. As the industry's leading innovator CRC is committed to providing hospitals with a safer and more efficient work environment.

Our systems deliver:

- Fast, accurate, and reliable room pressure, temperature, and humidity control
- Reduced liability with fully automated room changeover
- Closed loop control with true variable feedback
- Industry's lowest air valve pressure drop
- Energy efficient control sequences
- Clear intuitive LCD touch screens
- Standalone or integral piece to pandemic preparedness plan

## Multiple Room Monitor:

CRC-MRM

Critical Room Control's Multiple Room Monitor is an advance compact display module that continuously monitors the occupancy and alarm status of up to four (4) individual rooms via hardwire or network connection. The CRC-MRM also allows the remote monitoring of five additional environmental points per room (20 points total) via on board network connectivity.

- Bright / sunlight readable 5.7" LCD touch screen
- Designed to integrate seamlessly with CRC-RPM/C and BAS
- Device can be configured to monitor up to 4 rooms
- Display and alarm up to 5 user selectable data elements (points) for each of the four (4) rooms
- Resistive touch control - Use bare finger, gloved finger, or stylus to interact with LCD screen
- Clear / unambiguous display of rooms overall status and points
- Local alarm acknowledge (silence)
- In addition to the five (5) data elements (points), each room has an independent overall status with audible and visual alarm



## CLOSED LOOP VALVES:

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- Fast acting and failsafe
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- Accurate to  $\pm 5\%$  of flow
- No minimum static pressure requirements
- No required straight duct runs
- 10 to 1 turndown
- Aluminum, steel, stainless steel, and coated construction
- Mount in any orientation



## Room Pressure Monitor / Controller:

CRC-RPM / CRC - RPC

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status, precaution information, and current pressure readings.

Some of the features that make CRC's Room Pressure Controller the industry leader include:

- Monitor / control up to two rooms with one controller
- 5 fully customizable modes
- Automated room changeover
- Shows precaution information (Airborne, Droplet, Contact, Standard, None)
- Automated room clearing timer
- Best in class industrial grade dead ended direct pressure measurement
- Displays current value, alarm, and set point adjustment of up to 8 points
- Automated room clearing timer
- Onboard BACnet MS/TP Communications
- I/O and Network diagnostic functions



# OPERATING ROOMS / SURGICAL SUITES

A facility's infection control systems must ensure the safety of patients, staff and visitors. Space control systems must be designed to continually monitor and clearly display current conditions and alarms. Critical Room Control provides **complete turnkey systems that define best practices** and include intuitive user interfaces that clearly indicate current status while automating proper space use.

Surgical Suite solutions from Critical Room Control offer complete energy efficient environmental control

- Fast, accurate, and reliable room pressure, temperature, and humidity control
- Reduced liability with fully automated room changeover
- Closed loop control with true variable feedback
- Industry's lowest air valve pressure drop
- Energy efficient control sequences
- Clear intuitive LCD touch screens

## CLOSED LOOP VALVES: CRC-CLV

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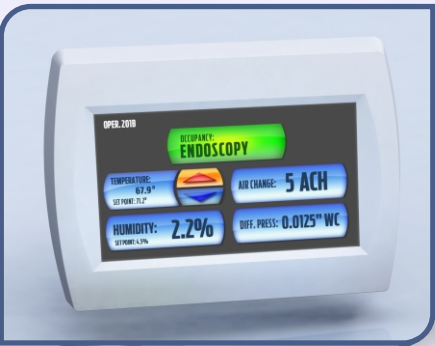
- Closed loop control
- True air flow measurement
- Industry lowest energy requirements
- Impervious to lint, dirt and dust
- Low pressure drop
- Confirmation of desired set point
- Fast acting and failsafe
- No scheduled maintenance
- Accurate to  $\pm 5\%$  of flow
- No minimum static pressure requirements
- No required straight duct runs
- 10 to 1 turndown
- Aluminum, steel, stainless, and coated valve construction
- Mount in any orientation

## Room Pressure Monitor / Controller: CRC-RPM / CRC - RPC

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status, precaution information, and current pressure readings.

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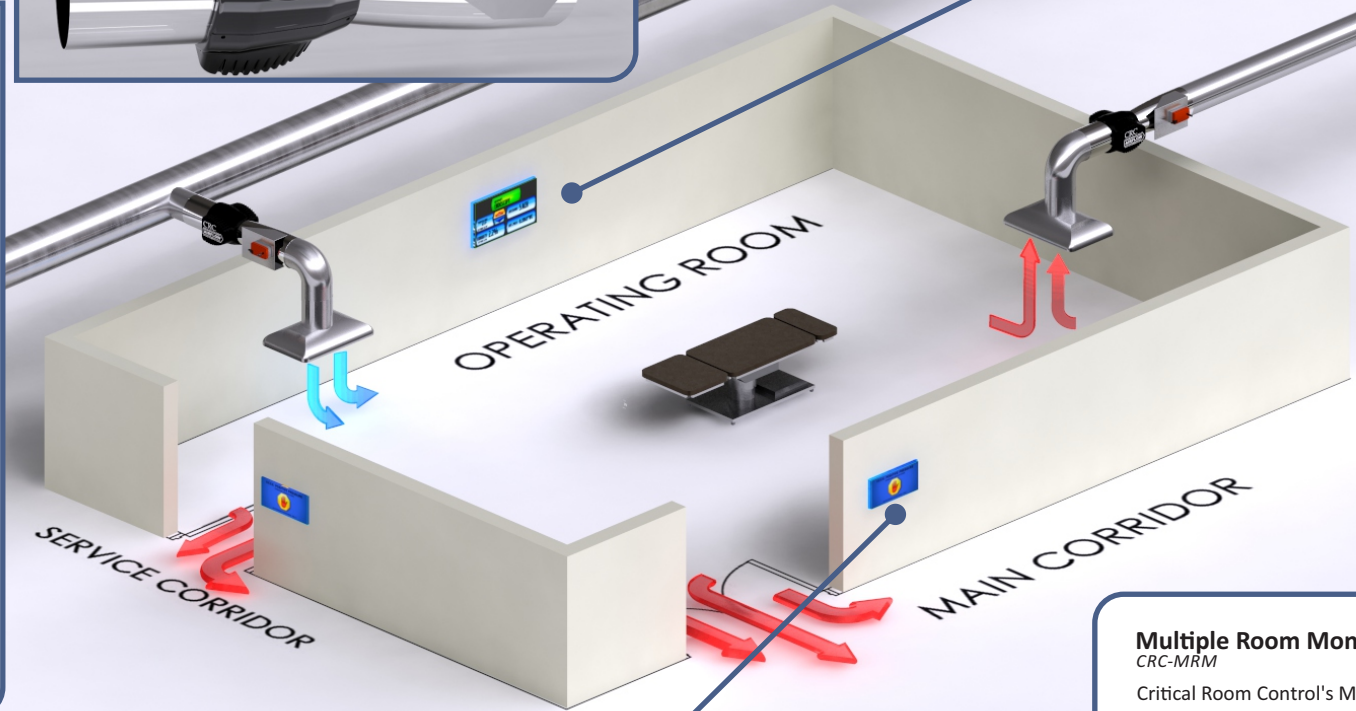
- Monitor / control up to two rooms with one controller
- Best in class industrial grade dead ended direct pressure measurement
- 5 fully customizable modes
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- Shows precaution information (Airborne, Droplet, Contact, Standard, None)
- Displays current value, alarm, and set point adjustment of up to 8 points
- Automated room clearing timer
- Onboard BACnet MS/TP Communications
- I/O and Network diagnostic functions
- Dual password protection



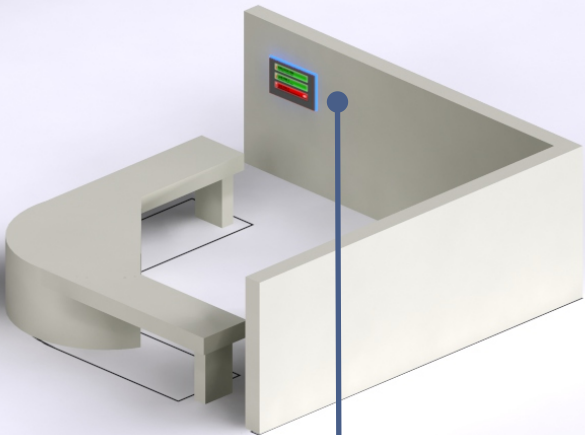
## MultiVIEW Monitor: CRC-MV

The MultiVIEW is an advanced 7" LCD touchscreen display that is designed to be configured for any monitoring or sequencing application. It's core function is to give local access to critical information in an easy to read display. It supports up to six (6) fully configurable graphical icons - allowing the facility user to view and/or make changes to point values, modes, status, set points, and alarms.

- Bright/sunlight readable 7.0" LCD touch screen
- Displays large, easy to read values, set points, room status, modes and alarms
- Supports local and remote audible and visual alarms
- Analog and digital input and outputs for point values, modes or status indicator
- Network for values, modes or status points
- Set point, status and mode networked or hardwired



NURSES STATION



## Multiple Room Monitor: CRC-MRM

Critical Room Control's Multiple Room Monitor is an advanced compact display module that continuously monitors the occupancy and alarm status of up to four (4) individual rooms via hardwire or network connection. The CRC-MRM also allows the remote monitoring of five additional environmental points per room (20 points total) via on board network connectivity

- Bright / sunlight readable 4" or 5.7" LCD touch screen
- Designed to integrate seamlessly with the CRC-RPM/C or BAS
- Device can be configured to monitor up to 4 rooms
- Display and alarm up to 5 user selectable data elements (points) for each of the four (4) rooms
- Resistive touch control - Use bare finger, gloved finger, or stylus to interact with LCD screen
- Clear / unambiguous display of rooms overall status and points
- Local alarm acknowledge (silence)
- In addition to the five (5) data elements (points), each room has an independent overall status with audible and visual alarm





# PHARMACIES / ONCOLOGY

Pharmacy/Oncology solutions are designed to meet the **US Pharmacopeia Chapter 797** requirements. CRC delivers a complete system ensuring that sterile compounding areas maintain ventilation rates and proper pressure relationships. Critical Room Control provides **complete turnkey systems that define best practices** and include intuitive user interfaces that clearly indicate current status while automating proper space use.

Pharmacy/Oncology solutions from Critical Room Control offer complete energy efficient environmental control

- Fast, accurate, and reliable room pressure, temperature, and humidity control
- Reduced liability with fully automated room changeover
- Closed loop control with true variable feedback
- Industries lowest air valve pressure drop
- Energy efficient control sequences
- Clear intuitive LCD touch screens



### CLOSED LOOP VALVES:

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In order to ensure that safe operating conditions are being met, it is critical to measure the output that is being controlled. Our unique closed loop venturi valve provides long term reliability, unmatched accuracy, and true airflow measurement.

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- Mount in any orientation

### Multiple Room Monitor:

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- Monitors up to 4 rooms
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- Seamless integration with the CRC system and BAS
- Clearly indicates any hazardous conditions within suite of lab spaces before entering suite
- In addition to the five (5) data elements (points), each room has an independent overall status with audible and visual alarm



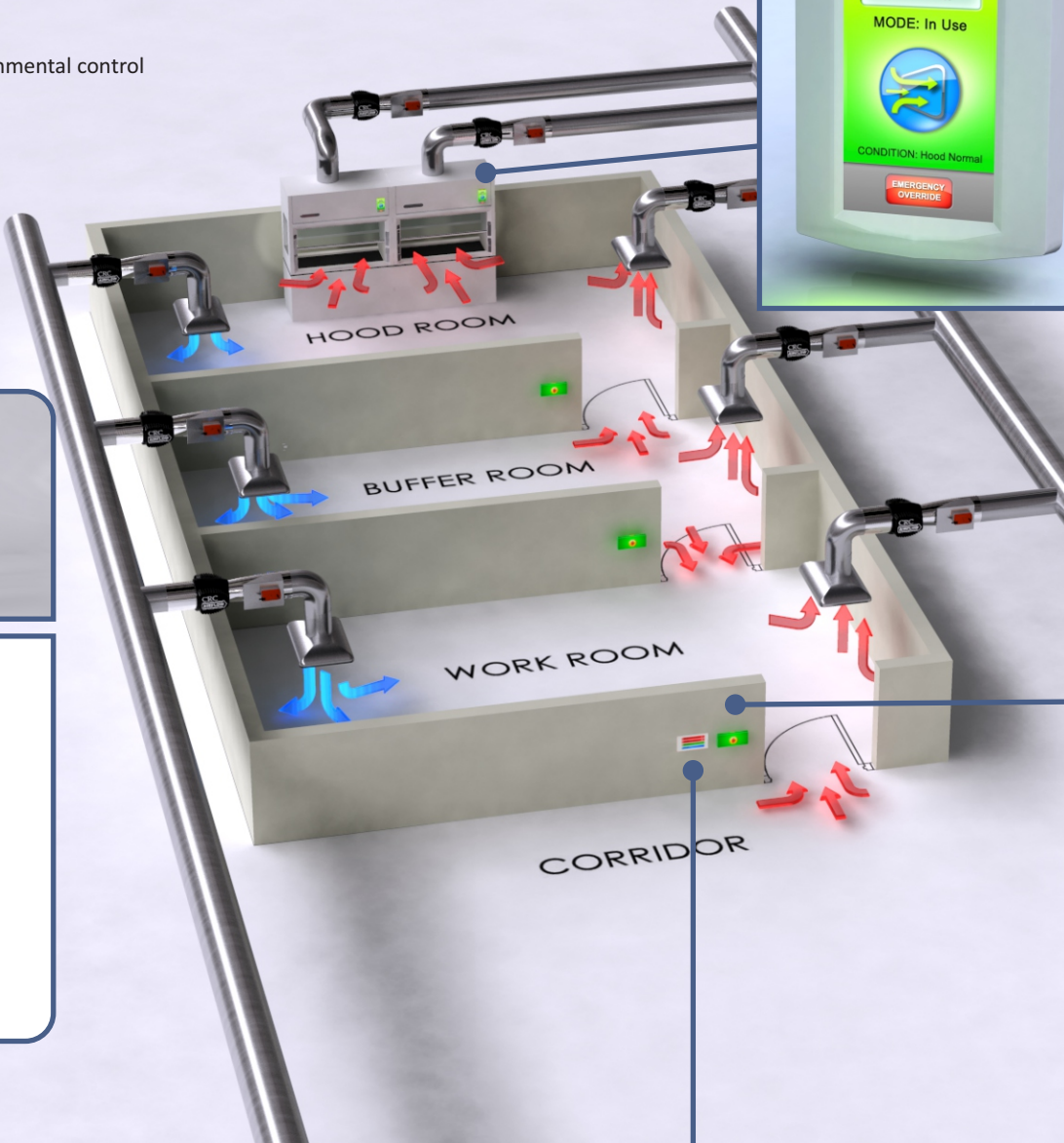
### Fume Hood Monitor / Controller:

*CRC-FPM / CRC - FPC*

The Fume Hood Controller (CRC-FHC) is designed to monitor and control a single fume hood where proper flow is vital.

Some of the features that make CRC's FHM the industry leader include:

- Monitor and control fume hood face velocity or volume
- Fast, accurate, stable and reliable control of fume hood face velocity
- Full color touch screen clearly indicates fume hood condition and alarms
- Supports constant volume or variable volume hoods
- Supports direct sidewall, vertical, horizontal, and combination sash sensing
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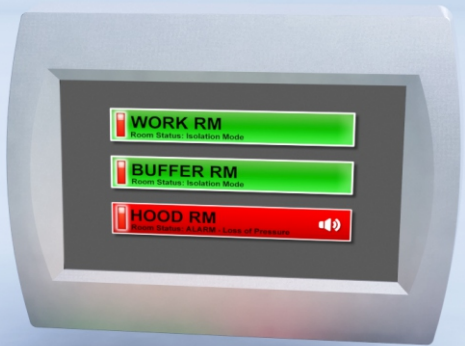


### Lab Pressure Monitor / Controller:

*CRC-LPM / CRC - LPC*

The bright, colorful, easy to read LCD touch screen can monitor and control the pressure relationship of up to two rooms while giving clear indication of the room's current status and pressure readings.

- Monitor / control up to two rooms with one controller
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- Best in class industrial grade dead ended direct pressure measurement
- Displays current value, alarm, and set point adjustment of up to 8 points
- Onboard BACnet MS/TP Communications





# ROOM PRESSURE MONITOR / CONTROLLER

CRC RPM / CRC RPC

Our Room Pressure Monitors are specifically designed to give personnel a clear, accurate, and unambiguous indication of the room’s pressure environment and alarm status. Unlike other monitors that include LEDs or LCDs with cluttered graphics and confusing / hard to use interfaces, CRC uses clear to understand graphics with a bright vibrant color touch-screen that can be easily configured to meet an individual facility’s needs.

From concept to completion of our designs, we continually seek feedback from the end user. We incorporate features that not only improve safety and efficiency, but also drive industry standards and best practices in systems that monitor and control critical spaces. This approach has made Critical Room Control the technology leader in critical environment applications.

**EASILY HIDE / SHOW DIFFERENTIAL PRESSURE**

**CUSTOMIZABLE ROOM NAMES**

**CUSTOMIZABLE MODE LABELS**

**ROOM PRECAUTIONS (optional)**

*Safeguarding the lives of staff and visitors should be paramount when selecting the proper isolation room monitor / controller. Infectious control is especially important with Negative Isolation Rooms. That is why our monitors display precaution information prominently on the main screen. CRC is the ONLY monitor on the market today that offers this important feature.*

**Available Precautions:**

- Airborne Precautions
- Droplet Precautions
- Contact Precautions
- Standard Precautions
- None

**CUSTOMIZABLE BACKGROUND COLORS**



CRC-RPC Configured for Typical Isolation Room


MODE: **NEGATIVE PRESSURE**  
AIRBORNE PRECAUTIONS

AUTHORIZED PERSONNEL ONLY

**AUTOMATED CLEARING / PURGING**

*A feature of the RPM/C is the ability to configure it with an automatic clearing time. When the device is switched from Isolation Mode to Non-Isolation Mode, the device will automatically maintain the pressurization of the room and display the clearing screen until the clearing time has expired.*

*A countdown timer is displayed on the main screen, giving minutes and seconds left in clearing mode.*



MODE: **CLEARING**  
STANDARD PRECAUTIONS

AUTHORIZED PERSONNEL ONLY


**“OCCUPIED - NO PRESSURE” MODE**

*To help facilities better utilize the rooms they have, the CRC-RPM/C offers a non-isolation occupied mode which will control the room’s pressure to a non-isolation set point providing considerable energy savings.*

**ROOM CHANGE OVER AUTOMATION**

*To speed up room changeover and increase room utilization, the CRC-RPM/C offers a “TO BE CLEANED” mode. This mode can be remotely communicated to housekeeping / cleaning personnel.*


*After the room is cleaned, personnel only need to touch the “CLEANED” button to switch the CRC-RPM/C to “VACANT” Mode.*



MODE: **TO BE CLEANED**  
STANDARD PRECAUTIONS

CLEANED

AUTHORIZED PERSONNEL ONLY



MODE: **VACANT**

AUTHORIZED PERSONNEL ONLY

**“VACANT” MODE**

*The CRC-RPM/C “VACANT” Mode gives a clear indication that the room is available for occupancy. While in this mode, the CRC-RPM/C is conserving energy by controlling the room’s pressurization to a non-isolation set point.*

## PRESSURE ALARM SEQUENCE OF EVENTS:

OPER. 102 0.0121"WC

MODE: **OR IN USE**

AUTHORIZED PERSONNEL ONLY

OPER. 102 0.0000"WC  
\*LOSS OF PRESSURE - CHECK DOOR\*

MODE: **OR IN USE**

AUTHORIZED PERSONNEL ONLY

OPER. 102 0.0000"WC  
\*PRESSURE ALARM - CHECK DOOR\*

MODE: **OR IN USE**

AUTHORIZED PERSONNEL ONLY

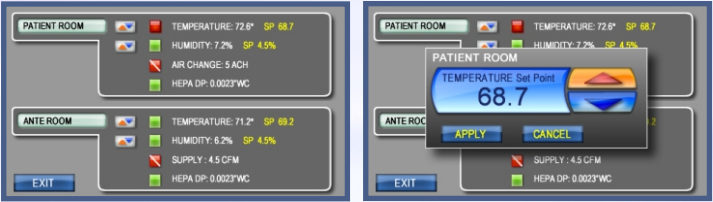
When a drop in pressure occurs, the RPM/C will display “Loss Of Pressure - Check Door” text by Room Label.

When the audible alarm delay expires (configurable) the unit will go into audible alarm and change the screen to red.

### “MORE INFO” SCREEN

A powerful feature of the CRC - RPM / RPC is the MORE INFO screen that allows staff to access additional environmental information, check alarms, and make set point changes.

Up to 8 additional points can be independently configured to show current values and set points, audible and visual alarms, and allow set point changes.



PATIENT ROOM

TEMPERATURE: 72.8° SP 68.7  
HUMIDITY: 7.2% SP 4.5%  
AIR CHANGE: 5 ACH  
HEPA DP: 0.0023"WC

ANTEROOM

TEMPERATURE: 71.2° SP 68.2  
HUMIDITY: 6.2% SP 4.5%  
SUPPLY: 4.5 CFM  
HEPA DP: 0.0023"WC

EXIT



# MULTIVIEW MONITOR

CRC MV

The MultiVIEW is an advanced 7" LCD touchscreen display that is designed to be configured for any monitoring or sequencing application. Its core function is to give local access to critical information in an easy to read display. It's versatile design allows any of its on-board analog, digital inputs, or network connections to drive the information being displayed on the screen. Additionally, any of the on-board analog outputs or relays can be setup to drive a signal out to a BAS or peripheral device such as a valve or VFD. The MultiVIEW supports up to six (6) fully configurable graphical icons. The six graphical icons allow the facility user to view and/or make changes to point values, modes, status, set points, and alarms.

The icons can be independently configured to retrieve their value from an analog input (0-5v, 0-10v, 4-20mA), digital input, or network communication.

To support virtually any sequencing scenario, the four on-board analog outputs and relays can also be configured to be driven by a point's alarm status, audible alarm status, current value, or set point value.

BRIGHT / SUNLIGHT READABLE 7" LCD TOUCH SCREEN

LIST ICON SUPPORTS UP TO 5 LIST VALUES

FULLY CUSTOMIZABLE LAYOUT  
5 Icon layouts, plus the ability to hide a specific icon

EASY TO SEE VISUAL AND AUDIBLE ALARMS

- 3 Alarm States:
- Alarm
  - Audible Alarm
  - Alarm - Muted

## INTEGRATED I/O CAN BE CUSTOMIZED TO SUPPORT ANY HARDWIRE SEQUENCING NEEDS

### 4 Analog Inputs

- Can be configured to:
- Drive current value
  - Drive list value

### 4 Analog Outputs

- Can be configured to:
- Hardwire current set point value
  - Mirror any analog input
  - Output a constant voltage signal for each list item

### 4 Digital Inputs

- Can be configured to:
- Drive binary list value (i.e. On / Off, Open / Closed, etc.)

### 4 Relays

- Can be configured to:
- Mirror DI
  - Communicate point's alarm status
  - Communicate point's audible alarm status
  - Open / close based on list item selected

## UP TO 6 FULLY CUSTOMIZABLE ICONS

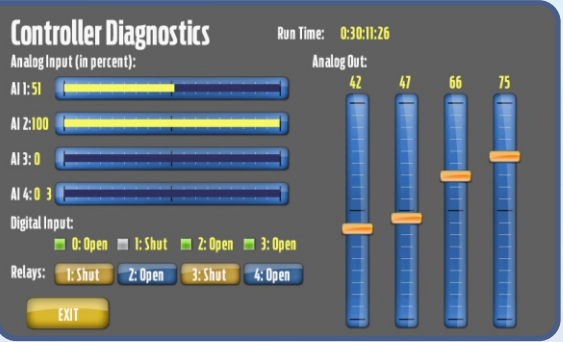
- Customization options include:
- Default background color
  - Show / hide set point
  - Allow set point change
  - Engineering units
  - Number of decimal places to display
  - Background color per list item
  - Individual audible alarm delays

## EASY TO ADJUST SET POINT

## EASY TO READ VALUES AND STATUS

## I/O DIAGNOSTIC SCREEN

Installers can easily troubleshoot hardwire connections to the MultiVIEW Monitor. This screen visually shows the incoming signal for all analog and digital inputs, and allows the user to set individual analog outputs or relays. **This feature is available on ALL of CRC's monitors.**





# FUME HOOD MONITOR / CONTROLLER

CRC FHM / CRC FHC

The Fume Hood Controller (CRC-FHC) is designed to monitor and control a single fume hood where proper flow is vital. The CRC-FHC includes all of the functionality of the CRC-FHM, with additional hardware / software that allows for control of a single fume hood.

### Feature summary of the CRC-FHM and CRC-FHC:

- Monitor hood face velocity
- Supports direct face velocity and volumetric control strategies
- Controls fume hood face velocity or volume (CRC-FHC only)
- Supports constant volume or variable volume hoods
- Supports direct sidewall , vertical sash, horizontal sash and combination sash sensing
- Fully integrated BACnet MS/TP communications
- Can operate as a standalone device, a component part of a Critical Room Control complete space solution, or integrate with Building Automation System



CLEAR INDICATION OF HOOD FACE VELOCITY OR VOLUME

SUPPORTS IMPERIAL AND METRIC READOUTS

ENERGY SAVING SEQUENCING AND CONTROL LOGIC  
*Can be configured with an occupancy sensor to automatically go into standby mode after a period of inactivity*

EASY TO FIND EMERGENCY OVERRIDE BUTTON

### MULTIPLE USER MODES AND SET POINTS



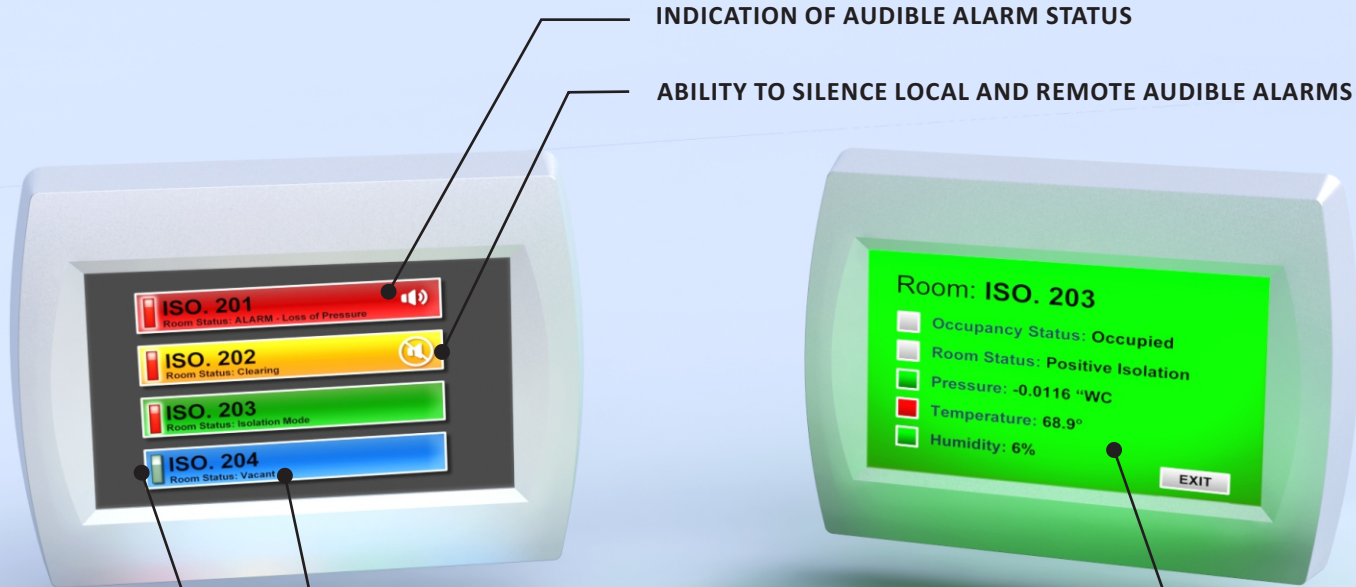
# MULTIPLE ROOM MONITOR

CRC MRM

Critical Room Control's Multiple Room Monitor is an advanced compact display module that continuously monitors the occupancy and iso alarm status of up to four individual rooms via hardwire or network connection. The CRC-MRM also allows the remote monitoring of five additional environmental points per room (20 points total) via on board network connectivity.

Perfectly suited for healthcare, lab vivarium, and manufacturing environments and applications, the Multiple Room Monitor offers the following features:

- Bright / sunlight readable 5.7" LCD touch screen
- Designed to integrate seamlessly with CRC-RPM/C and CRC-RM
- Device can be configured to monitor up to 4 rooms
- Display and alarm up to 5 user selectable data elements (points) for each of the four rooms (20 total)
- Resistive touch control - Use bare finger, gloved finger, or stylus to interact with LCD screen
- Clear and unambiguous display indication of rooms overall status and points
- Field configurable easy and intuitive menus
- Audible Alarm Silence (on screen and remote)



INDICATION OF AUDIBLE ALARM STATUS

ABILITY TO SILENCE LOCAL AND REMOTE AUDIBLE ALARMS

DISPLAY / ALARM UP TO 5 DATA ELEMENTS PER ROOM  
*Display and alarm up to 5 data elements (points) for each of the four rooms (20 total)*

DISPLAY OF ROOM'S OCCUPANCY STATUS

DISPLAY OF ROOM'S ISO STATUS



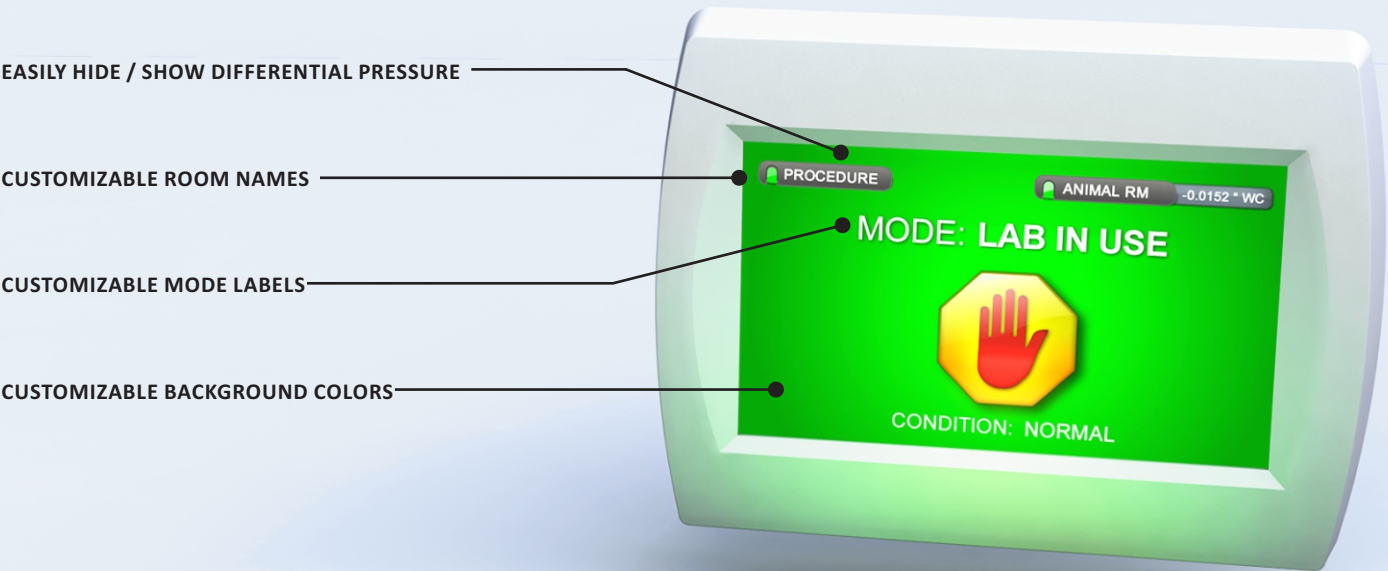
# LAB PRESSURE MONITOR / CONTROLLER

CRC LPM / CRC LPC

Critical Room Control’s Lab Monitors are designed to give researchers and staff clear indication of critical information, along with efficient space management tools. The full color intuitive touch screen interface, with up to five user defined modes, offers unparalleled sequencing and automation of the room environment. With the industry’s only "More Info" screen, the CRC Lab Monitor allows users to access, alarm, display values, and change set points of up to eight points to help ensure proper lab conditions are being met.

As the industry’s innovation leader, we at CRC have applied years of field experience to develop the preeminent lab monitor to increase safety and efficiency, while providing a better working experience.

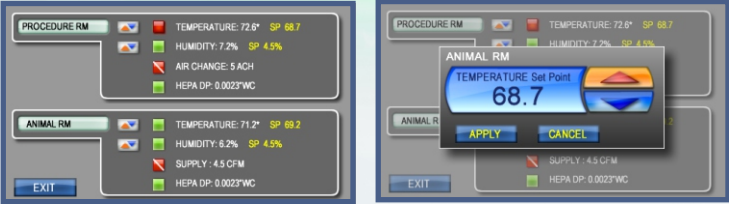
Each Lab Monitor includes up to five fully configurable modes based on unique lab requirements and processes. Each mode is fully integrated and synchronized with the CRC control system and other CRC monitors. This integration allows us to deliver critical information at multiple locations, creating a safer, more efficient work environment.



**“MORE INFO” SCREEN**

A powerful feature of the CRC - LPM / LPC is the MORE INFO screen that allows staff to access additional environmental information, alarms, and make set point changes.

Up to 8 additional points can be independently configured to show current values and set points, audible and visual alarms, and allow set point changes.



# CLOSED LOOP VALVE

CRC CLV

Technology, innovation and the belief you should always verify what you control was instrumental in the development of the CRC-CLV (Closed Loop Venturi). Much like the researcher who reviews actual data from experiments, CRC uses true air flow feedback to verify actual flow. We combine innovation, simplicity and fluid dynamics in our intelligently designed closed loop venturi air valve. Our CRC-CLV is the best solution when it is imperative to verify that desired operating conditions are being met and confirmed. The CLV's energy efficient low pressure drop design dramatically lowers operating expenses. True industrial grade components ensure long term reliability and accuracy critical in guaranteeing a safe work environment.

Pressure Independence:  
The closed loop control strategy of actually measuring air flow allows the CRC-CLV to be truly pressure independent. Our venturi valve's true flow feedback does not require strict static pressure tolerances to operate.

**Features and Benefits:**

- True flow feedback
- Closed loop control strategy
- Pressure independent
- Energy efficient low pressure drop
- High turn down
- Long term reliability
- Impervious to lint, dirt, dust, hair, and dander
- Confirmation of desired set point (no assumption of flow)
- Available in aluminum, steel, stainless steel, and protective coated
- Fast speed of response
- No scheduled maintenance
- Minimal moving parts
- No critical components in the air stream
- Quiet

