

Lab Pressure Monitor / Controller

Rev 5.1

FEATURES:

- Full color energy efficient ultra thin LCD touch screen interface (LED backlight)
- Direct pressure measurement with dead ended silicon diaphragm
- Capable of monitoring and controlling one (2) pressure relationships
- Supports positive, negative and neutral environments
- Indicates appropriate precautions to be taken when entering room
- Display resolution to 0.0001" WC
- Supports multiple pressure ranges
- Audible and visual alarms
- Four fully configurable modes
- Full automation of room changeover
- Automated clearing / purging
- Monitors, alarms and allows local set point control of up to eight (8) additional parameters
- Password protected access
- Visual I/O diagnostics of points
- Water spray and dust resistant ultra thin surface mount enclosure
- Resistive touch control Use bare finger, gloved finger, or stylus for interaction
- All parameters / settings saved in nonvolatile memory
- Field configurable, easy, and intuitive menus
- Ability to "Zero" calibrate the pressure transducer with a touch of a finger
- Supports multiple BMS protocols



OVERVIEW:

CRC's Lab Pressure Monitor / Controller model CRC-LPC1 accurately monitors and/or controls one differential pressure relationship where proper pressurization is vital. The CRC- LPC1 can meet the stringent critical environment of; isolation rooms, operating rooms, pharmacies, research facilities and animal rooms. The CRC- LPC1 utilizes direct pressure measurement with industrial quality differential pressure transducer technology capable of displaying pressure to 0.0001"WC.

The primary screen of the LPM/C1 clearly displays current isolation mode along with differential pressure and optional precautionary information. A secondary screen allows the display, alarm, and set point adjustment of 8 additional points. Room changeover automation and automated clearing / purging functions allow facilities to optimize room utilization while insuring the safety of patents, staff and visitors.

Each monitor / controller incorporates an easy to navigate microprocessor based controller with full color touch screen interface. All settings / configuring is made by an easy to navigate touch screen interface or via network. The CRC-LPC1 can be configured as a pressure monitor only or complete system controller. The CRC-LPC1's analog inputs/outputs and/or communications allow the CRC-LPC1 seamlessly integrate with the CRC-CLV air valve, Critical Room Control system, or building automation systems.

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Rev 5.1

DISPLAY:

Description: Full color LED TFT 16 bit (65,535) color depth, sunlight viewable, 320cdm brightness, touch

screen interface - resistive touch (will work with gloved finger). Screen is capable of wipe

down cleaning and water spray and dust resistant meeting (IP-54)

Listing: CSA©, RU(us), UL 60950, UL 94 V-0 (Enclosure)

Screens: Five (5) user defined modes, field configurable verbiage, configurable screen color,

patented clearing timing features

Main Screen: Background color field configurable for green (default), red or blue

Modes: Total of five (5) user configurable modes including fully automated room changeover

More Info: Supports up to eight user defined network values allowing local display of points

descriptor, value, set point change, visual and audible alarming

I/O Diagnostic: Graphical display of controller analog inputs/outputs and digital inputs/outputs

Mounting: Low profile surface

POWER REQUIREMENTS:

Input Power: 22 to 26VAC; 50/60Hz, fully isolated

Power Draw: 18 VA
Primary: 24VAC Input

ENVIRONMENTAL CHARACTERISTICS:

Temperature Limits:

Storage: -40 to 180
Operating: +0 to 160
Compensated Range: +35 to 130

Temperature Coefficients:

Zero: $\pm 0.03\%F.S./F$ Span: $\pm 0.03\%F.S./F$ Listing: UL-94-5VA

EMC: Œ compliant to EN61326: 1997+A1: 1998+A2: 2001 annex A (heavy industrial)

PERFORMANCE CHARACTERISTICS:

Accuracy Class (F.S.): ±0.4% & ±0.8% (includes the effects of non-linearity, hysteresis, and non-

repeatability)

Stability-Max. Change: ≤0.25% (full scale/year)

Unidirectional Range: 0/0.1, 0/0.25, 0/0.5, 0/0.75, 0/1.0, 0/2.0, 0/2.5, 0/3.0, 0/5.0, 0/10.0, 025.0

Compound Range: $\pm 0.1, \pm 0.25, \pm 0.5, \pm 1.0, \pm 2.0, \pm 5.0, \pm 10.0$

Response Time: 250msec

Over Pressure limits:

Proof Pressure: 15psi Burst Pressure: 25psi Max. Static Line Press: 25psi

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Rev 5.1

PRESSURE ALARMS:

Audible: 2 (pressure alarm & remote alarm)

Visual: 2 (amber (loss of pressure), red (alarm))

CONTROLLER I/O:

Analog Inputs: 4 (4-20mA, 0-10V, or 0-5V)

Analog Outputs: 4 (0-10V or 0-5V)

Digital Inputs: 4

Relays: 4 (normally closed - 0.5 A at 125 VAC; 2 A at 30 VDC)

Terminals: Removable screw terminals (18ga - 26ga wire)

Enclosure: Fire retardant, extruded acrylic/PVC alloy UL94V

Communication: RS-485

Onboard power: 10vdc (80mA max.), 5vdc (80mA max.), and onboard loop power circuit 22VDC (80mA max.)

COMMUNICATION:

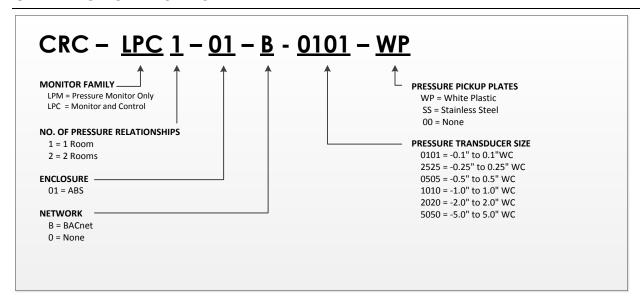
Connection: RS-485

Supported Protocol: BACnet MS/TP: Modbus, Johnson Controls Incorporated N2 & LON with optional card

Network Debug: Network communication diagnostics

Network Setup: Baud rate, MAC address and instance ID configured via touch screen

ORDERING NOMENCLATURE:



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ADDITIONAL SCREENS:





ADDITIONAL PRODUCT INFORMATION:

Please contact us at:

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