



RPM-2000 GUARDIAN REMOTE PRESSURE MONITOR

Description

The **Guardian RPM** is a remote pressure monitor designed for indicating the differential pressure value and alarm status from multiple Guardian Space Pressure Monitors (SPM). The **Guardian RPM** can also be used to make global and individual SPM configuration changes such as high and low alarm setpoints, alarm delay value, operating mode, engineering units, etc. The **Guardian RPM** communicates with the individual SPMs through a dedicated twisted pair connection using BACnet®-MS/TP communication protocol. The **Guardian RPM** is typically located at the nurse's station for hospital applications or at the facility maintenance office for laboratory applications.

The **Guardian RPM** includes an eight line graphics display for indicating the room number, differential pressure value, engineering units, current operating mode, and alarm setpoint values of the room being displayed. An alarm status light is provided for each room being monitored. In the event an alarm condition occurs, the associated alarm status light will flash red and the audible alarm will activate. Pressing the alarm acknowledge button will turn off the audible alarm and cause the red status light to remain on until the associated room returns to its' safe operating pressure. When the room has returned to its' safe operating pressure the alarm status light will change from red to green. If the room returns to its' safe operating pressure before the alarm acknowledge button is pressed, the alarm status light will flash green until the alarm acknowledge button is pressed.

Features

- Backlit eight line graphics display for indicating differential pressure, room identifier, engineering units, and alarm setpoint values.
- Room pressure can be indicated in inch water column, Pascal, kiloPascal, or millimeter water column.
- Individual room LED to indicate normal and alarm status
- Audible alarm and global alarm acknowledge to all attached devices
- Remote configuration of networked Guardian room pressure monitors
- Device interconnection by twisted pair wire using BACnet® MS/TP communication protocol
- Automatic polling to determine number and type of devices attached
- Monitor from 1 to 24 Guardian space pressure monitors
- Flush mounted electrical panel, with brushed stainless steel front panel
- Key lock and password protected

RPM-2000 Technical Specifications

Indication

1. Display

A backlit, graphical LCD providing 8 lines of data display. Also used for programming

Communication

2. Protocol

BACnet® to SPM

Variables

3. Engineering Units

Inch w.c.
Pa
KPa
mm of w.c.

4. Audible Alarm

Selection of ON/OFF

5. Field Password

Accepts up to 5 numeric characters

6. Alarm Status

Indicated by green/red LED

Power

7. Power Supply

20 to 28 VAC (50/60HZ)

8. Power Consumption

Up to 6 Room RPM: 1.29 VA @ 24 VAC

Up to 12 Room RPM: 1.53 VA @ 24 VAC

Up to 18 Room RPM: 1.77 VA @ 24 VAC

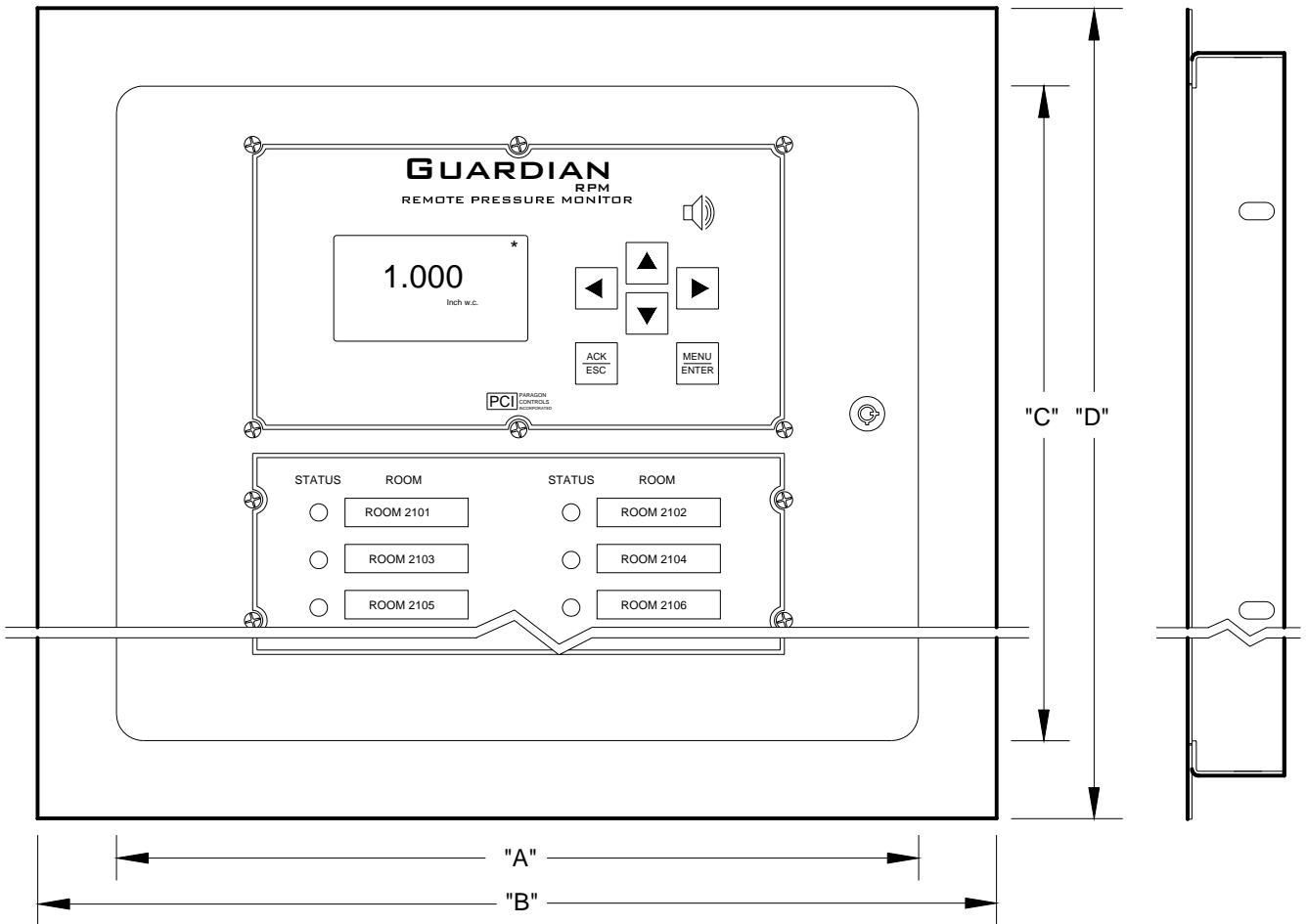
Up to 24 Room RPM: 2.01 VA @ 24 VAC

9. Circuit Protection

Power input is isolated and supplied with a resettable fuse

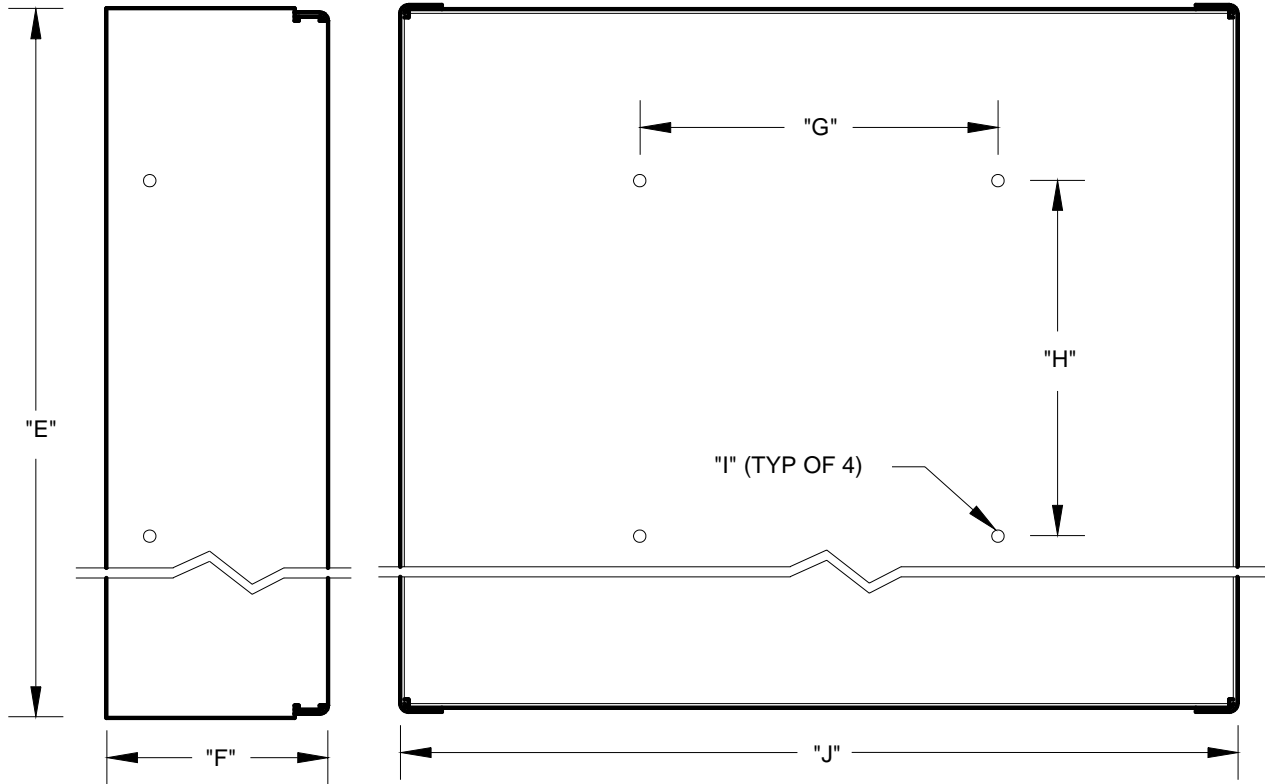
RPM-2000 Dimensions

RPM FACE PANEL



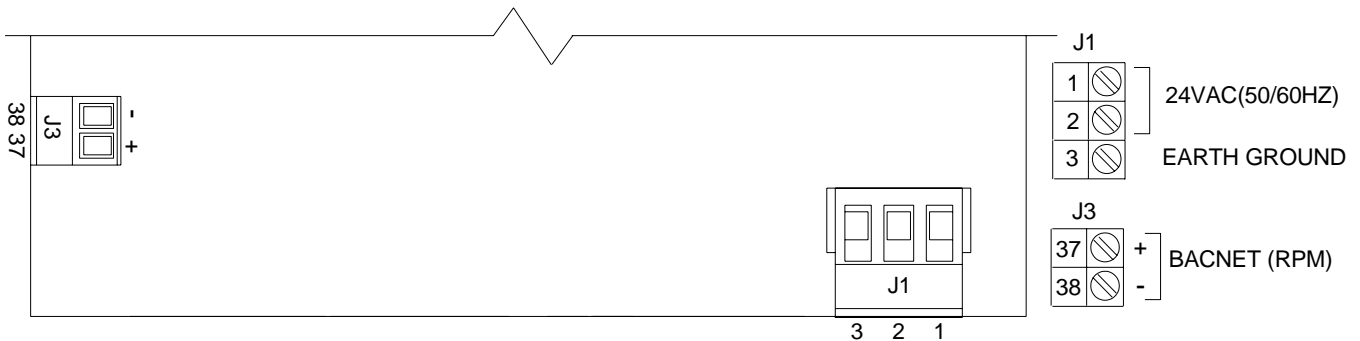
RPM-2000 Dimensions Continued

FLUSH MOUNT ELECTRICAL BOX



Dimension	1 to 6 Rooms		7 to 12 Rooms		13 to 18 Rooms		19 to 27 Rooms	
	in	mm	in	mm	in	mm	in	mm
A	11.5000	292.1000	11.5000	292.1000	11.5000	292.1000	11.5000	292.1000
B	13.6250	346.0750	13.6250	346.0750	13.6250	346.0750	13.6250	346.0750
C	9.5000	241.3000	11.5000	292.1000	13.5000	342.9000	15.5000	393.7000
D	11.6250	295.2750	13.6250	346.0750	15.6250	396.8750	17.6250	447.6750
E	10.6875	271.4625	12.6875	322.2625	14.6875	373.0625	16.6875	423.8625
F	3.3125	84.1375	3.3125	84.1375	3.3125	84.1375	3.3125	84.1375
G	5.3750	136.5250	5.3750	136.5250	5.3750	136.5250	5.3750	136.5250
H	5.3750	136.5250	5.3750	136.5250	5.3750	136.5250	5.3750	136.5250
I	0.1875	4.7625	0.1875	4.7625	0.1875	4.7625	0.1875	4.7625
J	12.5625	319.0875	12.5625	319.0875	12.5625	319.0875	12.5625	319.0875

RPM-2000 Field Connections



RPM-2000 Ordering Information

RPM-2 0

Number Of Rooms To Be Monitored:

Enter a number between 01 and 24.

RPM-2000 Specification Guide

General

1. A remote pressure monitor (RPM) and alarm display panel described herein shall be provided and installed at all locations indicated on the construction plans.
2. The RPM shall utilize a BACnet® network connection to monitor each individual space pressure monitor (SPM) it is serving.
3. The RPM panel shall be provided in a flush mounted wall enclosure with a brushed stainless steel face and key lock.
4. The RPM shall include a green and red light for local indication of the operational status of each room on its' local network. The green light shall indicate that the room is within normal operating pressure criteria and the red shall indicate an unsafe condition.
5. The RPM shall include a common audible alarm and alarm acknowledge pushbutton switch.
6. The RPM shall have an 8 line graphic display which shall indicate the room whose conditions are being displayed, the room's real time pressure, the current operating mode, and alarm setpoint values.

Acceptable Manufacturers

1. The RPM system manufacturer shall have a minimum of five (5) years of experience in space pressure monitoring and control, and shall be willing and able to provide a user list, with contact information, upon request.
2. The remote space pressure monitoring system shall be the Guardian model RPM-2000 as manufactured by Paragon Controls Incorporated, Santa Rosa, California, telephone (707) 579-1424.
3. Alternatives requesting acceptance "as equal" less than 60 days prior to bid date or products submitted in non-conformance with the requirements of this specification will not be considered. For any product to be considered for substitution a written detailed exception/compliance document shall be submitted to the Engineer prior to any consideration for approval.