

The Room pressure indicator (RPI) provides a bright and easy-to-read screen accurately displaying the differential pressure between two spaces. The graphic display is an unmistakable indication of the room condition for all pressurized spaces, indicating whether a space is operating within pressure requirements for Negative, Neutral, or Positive pressures.

The RPI features a 4" diagonal multi color screen visible from a distance to quickly recognize room pressure conditions. A real-time digital read of the pressure value combined with an indication of pressure polarity provide actionable information for space occupants, maintenance staff, and compliance officers. On-screen icons for door open and alarms can also sound an audible tone to provide further indication for potentially unsafe conditions in the space. BACnet MS/TP communication provides information to the BMS for trending and management. The numeric PIN protected menu reduces unwanted access to configuration and alarm parameters.

FEATURES

- Single room pressure indication for all pressurized spaces.
- Modern and elegant 4" diagonal touch screen.
- Vibrant background colors easily delineate between normal, alarm, warning, and standby conditions.
- Supports multiple pressure ranges.
- On-screen programming reduces start up time.
- Audible alarming quickly alerts users of pressurization issues.
- BACnet Communication allows BMS to monitor conditions.
- Analog output for use with Phoenix Controls valves for Progressive Offset Control (POC).
- Dry contact output for door open status or remote alarm annunciator.
- Door open status can delay alarm to reduce nuisance alarming.



Room Pressure Indicator (RPI)



Transducer and Pressure Port

APPLICATIONS

- Healthcare:
 - Patient and Isolation rooms
 - Operating suite
 - Compounding Pharmacy (USP 797/800)
 - Ante Room
- Wet Chemistry and BSL Labs
- Animal Holding Areas
- Endoscopy and Bronchoscopy Rooms

SPECIFICATIONS

Power

- 24vac (+/- 10%), 50/60Hz, Class 2 Transformer ONLY
360mA Max (8.68 VA) @24vac
• Display Power: 355mA Max (8.5VA) @ 24 Vac
• Transducer Power: 5mA Max (.18VA)

Communications

- MS/TP BAUD Rates: 9,600 19,200 38,400 76,800 115,000

Monitor Operating Temperature

32 to 122 deg f (0 to 50 deg c)

Monitor Storage Temperature

-40 to 150 deg f (-40 to 65.5 deg c)

Monitor Operating Humidity

10% to 90% relative humidity (Non-condensing)

Monitor Display

24 BPP TFT display with CTP, 480x480 pixel, 4" diagonal viewing area, Dimmable LCD. IP54 rated.

Monitor I/Os

UI1 and UI2

- Voltage Input (SELV)
 - 0-10V, $\pm 5\%$ of full scale
- Digital Input
 - Dry contact closure
 - Open circuit ($\geq 100K$ ohms)
 - Closed circuit (≤ 100 ohms)

DO Switch

- Relay Output, 1 Amp Max. @ 24Vac

Transducer Pressure Range

- +/- 0.10 in wc 0.50% Accuracy
- +/- 0.25 in wc 0.50% or 0.25% Accuracy
- +/- 0.50 in wc 0.50% or 0.25% Accuracy
- +/- 1.0 in wc 0.50% or 0.25% Accuracy

Transducer NIST Calibration Options

- 3 point NIST calibration: 10%, 50%, and 90% of FSO
- 5 point NIST calibration: 10%, 30%, 50%, 70%, and 90% of FSO

Transducer Sensor Compensated Temperature Range

32 to 122°F (0-50°C)

Transducer Operating Temperature

32 to 185°F (0 to 85°C)

Transducer Operating Humidity

10 to 95% RH, non-condensing

Transducer Storage Temperature

-40 to 176°F (-40 to 80°C)

Transducer Storage Humidity

10 to 95% RH, non-condensing

Transducer Thermal Effects

+/- 0.056% FSO/°F (+/-0.10% FSO/°C)

NOTE: Shift is relative to 77°F (25°C).

Transducer Warm Up Time

15 Minutes

Transducer Response Time (T95)

800 ms

Transducer Output Update Rate

500 ms

Transducer Zero Function (Pushbutton)

Recommended after 15 minute warm up period.

Transducer Proof Pressure/Burst Pressure

Ranges ≤ 1 " wc (248.84 pa)

- Proof: 270" wc (67.2 kPa)
- Burst: 415" wc (103.3 kPa)

Transducer Enclosure

Intended for use with non-corrosive, non-ionic gases, such as air and other dry gases.

- Material : Polycarbonate
- Flammability Rating: UL 94 V-0
- Enclosure Temperature Range: -40 to 248°F (-40 to 120°C)
- DIN Rail Mounting: 35mm (U.S. Patent no. 7,416,421)

Pressure Port Tubing Connection

Barbed fitting accepts 1/8"ID or 3/16"ID flexible control tubing

Pressure Port Maximum Operating Pressure

- Filter: 150 PSI (10.3 bar)
- Tubing: 100' length: 65 psi maximum at 73°F (23°C)

Pressure Port Operating Temperature Range

-40 to 150°F (-40° to 66°C)

Pressure Port Storage Temperature Range

-40 to 160°F (-40° to 71°C)

Pressure Port Wall Plate

- Material: 302 Series Stainless Steel
- Foam Material: Cross-Linked Polyethylene
- Flammability Rating: FMUSS-302
- Filter Material: Nickel Brass Plated

Pressure Port Weight

0.16 lbs (0.073 kg)

Retrofit Plates

- Stainless: Plates are made from 304 Stainless Steel
- White: Plates are made from 304 Stainless Steel and powder coated white

Washdown and Chemical Resistance

- Monitor: IP54 rated against dust and liquid penetration
- Adapter Plate: Minimum IP54 rated against dust and liquid penetration (when sealed to the wall with silicone or similar sealant)

Compliance



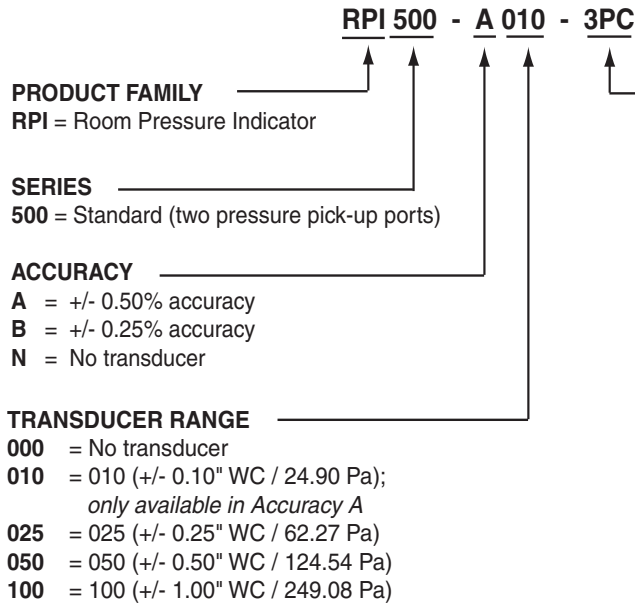
WEEE Directive 2012/19/EC

Waste Electrical and Electronic Equipment directive

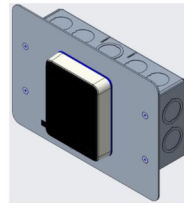
At the end of the product life dispose of the packaging and product in a corresponding recycling centre. Do not dispose of the unit with the usual domestic refuse. Do not burn the product.

- RoHS3
- EU Contact Address:
Pittway Tecnologica Srl
Via Caboto 19/3
34147 Trieste TS
Italy

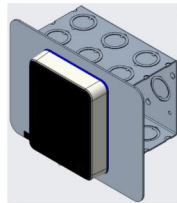
ORDERING GUIDE



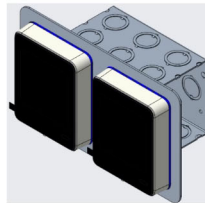
Retrofit Kit Examples



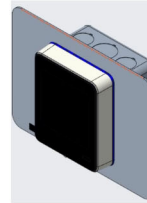
RSA/RWA
APM1xx to Single RPI



RSB/RWB
APM2xx to Single RPI



RSC/RWC
APM2xx to Dual RPI



RSD/RWD
Single RPI,
Double gang box

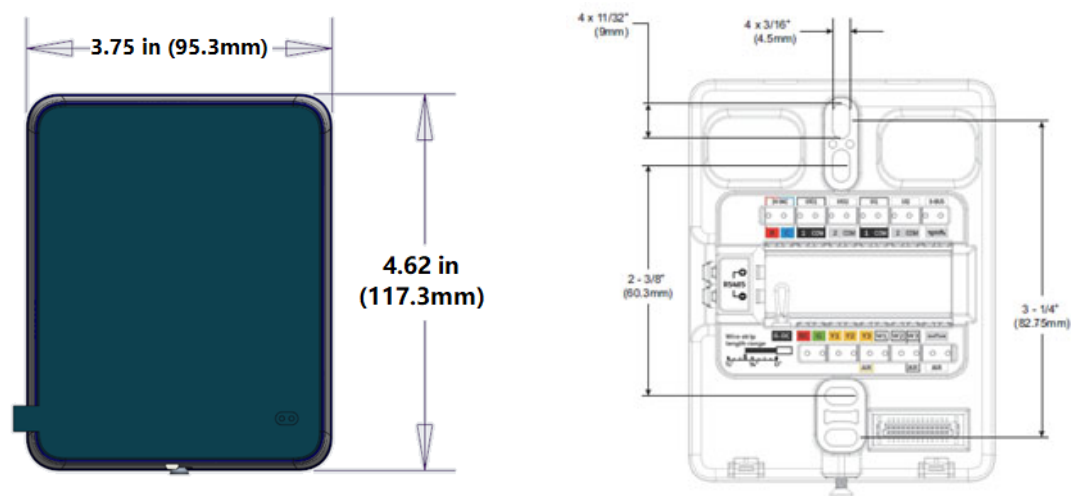
Spare Parts

Catalog Number	Description
RPI500-N000	RPI500 Monitor only
PRT-260-200-053	KIT RETRO SS APM1 TO SNGL RPI
PRT-260-200-054	KIT RETRO SS APM2 TO SNGL RPI
PRT-260-200-055	KIT RETRO SS APM2 TO DUAL RPI
PRT-260-200-056	KIT RETRO SS STD DBL GANG TO SNGL RPI
PRT-260-200-057	KIT RETRO WHT APM1 TO SNGL RPI
PRT-260-200-058	KIT RETRO WHT APM2 TO SNGL RPI
PRT-260-200-059	KIT RETRO WHT APM2 TO DUAL RPI
PRT-260-200-060	KIT RETRO WHT STD DBL GANG TO SNGL RPI
PRT-373-022-001LF	PRESS TRANS 0.25% 0.25IN NO-CAL
PRT-373-022-301LF	PRESS TRANS 0.25% 0.25IN 3P-CAL
PRT-373-022-501LF	PRESS TRANS 0.25% 0.25IN 5P-CAL
PRT-373-023-001LF	PRESS TRANS 0.25% 0.50IN NO-CAL
PRT-373-023-301LF	PRESS TRANS 0.25% 0.50IN 3P-CAL
PRT-373-023-501LF	PRESS TRANS 0.25% 0.50IN 5P-CAL
PRT-373-024-001LF	PRESS TRANS 0.25% 1.00IN NO-CAL

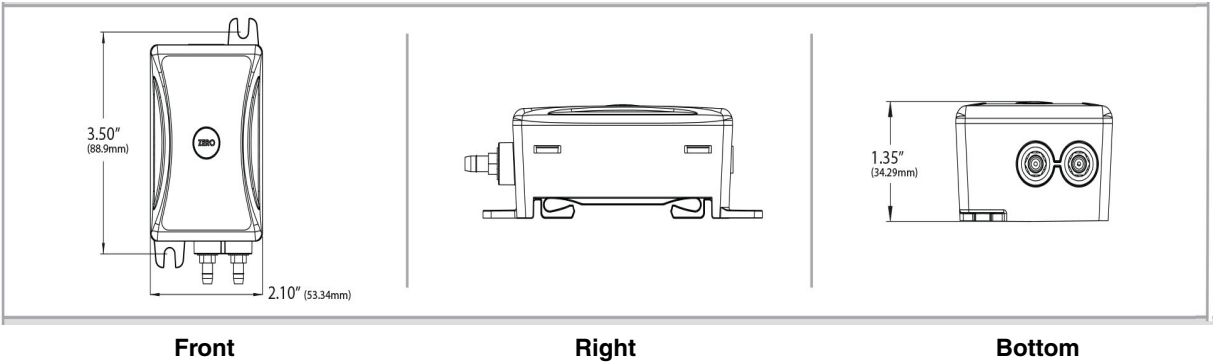
Catalog Number	Description
PRT-373-024-301LF	PRESS TRANS 0.25% 1.00IN 3P-CAL
PRT-373-024-501LF	PRESS TRANS 0.25% 1.00IN 5P-CAL
PRT-373-051-001LF	PRESS TRANS 0.50% 0.10IN NO-CAL
PRT-373-051-301LF	PRESS TRANS 0.50% 0.10IN 3P-CAL
PRT-373-051-501LF	PRESS TRANS 0.50% 0.10IN 5P-CAL
PRT-373-052-001LF	PRESS TRANS 0.50% 0.25IN NO-CAL
PRT-373-052-301LF	PRESS TRANS 0.50% 0.25IN 3P-CAL
PRT-373-052-501LF	PRESS TRANS 0.50% 0.25IN 5P-CAL
PRT-373-053-001LF	PRESS TRANS 0.50% 0.50IN NO-CAL
PRT-373-053-301LF	PRESS TRANS 0.50% 0.50IN 3P-CAL
PRT-373-053-501LF	PRESS TRANS 0.50% 0.50IN 5P-CAL
PRT-373-054-001LF	PRESS TRANS 0.50% 1.00IN NO-CAL
PRT-373-054-301LF	PRESS TRANS 0.50% 1.00IN 3P-CAL
PRT-373-054-501LF	PRESS TRANS 0.50% 1.00IN 5P-CAL
PRT-510-200-001	PLATE PRESS PICK-UP SS
PRT-630-200-002	TUBING PVC .125 X .250 X 100

DIMENSIONS

Monitor



Pressure Transducer



Pressure Pickup Port

