



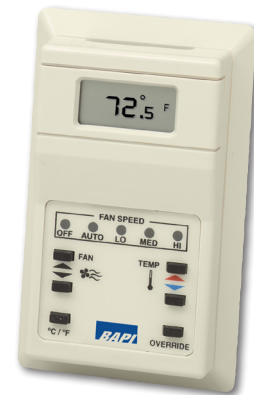
## Features & Options

- Delta Style Enclosure with Robust Tactile Pushbuttons
- Setpoint Adjust & Occupant Override
- Optional Fan Speed and Mode Control
- Optional Communication Jack and Test & Balance
- Wide Selection of Temperature Sensing Elements
- Two Year Warranty

Designed for use in applications with Fan Coils, Heat Pumps, Unit Ventilators and other Terminal Units, the R $\mu$ PM provides local indication of Temperature and Setpoint with Setpoint Adjust, Override, Fan Speed or Mode options. An optional Communication Jack can be mounted in the base to provide direct access to the network. The Setpoint is displayed for a short time after an adjustment.

The Setpoint can be programmed to display as an offset (i.e. -2, -1, 0, 1, 2) or as a value within a specified temperature range (i.e. 65 to 80 °F). The Override is a momentary signal that can be configured in parallel with the Sensor or Setpoint. Fan Speed or Mode are provided as a single analog output (resistive) and include LED indicators.

**For detailed specs on the individual Sensors & Transmitters, turn to the Sensors section.**



R $\mu$ PM

## BAPI-Guard

- Prevents Tampering
- Exceptional Airflow
- Two Sizes

(See Accessories)



## Specifications

**Power:** 5 VDC (only if 5 VDC option is selected when ordered)  
 11 to 35 VDC (15 to 24 VDC recommended) for 0 to 5V Setpoint  
 15 to 35 VDC (15 to 24 VDC recommended) 0 to 10V Setpoint  
 15 to 28 VAC (Requires a separate pair of shielded wires)

**Power Consumption:** 10 mA max. DC, .2 VA maximum AC

**Sensing Element:** Thermistor, RTD or Semiconductor

**Wiring:** 2 to 4 pair of 16 to 22AWG\*

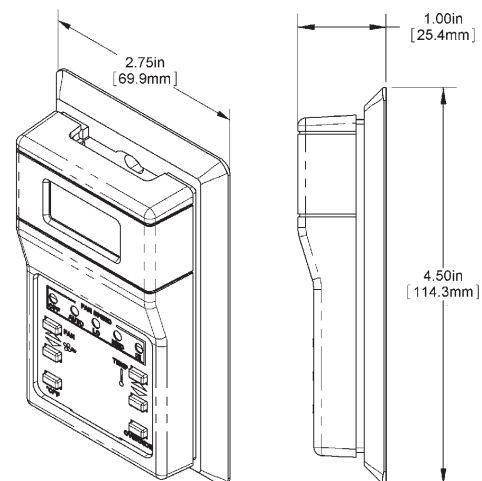
**Comm. Jack:** Optional 3.5mm (1/8") Phono Jack  
 or RJ11 Phone Jack

**Mounting:** Standard 2" by 4" J-box or drywall mount  
 (mounting screws provided)

### Environmental Operation Range:

Temperature: 32 to 122 °F (0 to 50 °C)  
 Humidity: 0 to 95%, non-condensing

**Enclosure Material & Rating:** ABS Plastic, UL94 HB



## VC350A "EZ" - Voltage Converter

BAPI recommends using DC power on room units for a more stable reading. Our 350mA "EZ" unit is a perfect way to convert 24 VAC to 5, 12, 15 or 24 VDC.



\*BAPI recommends that you do not run wiring for the Room Units in the same conduit as line voltage wiring or with wiring used to supply highly inductive loads such as motors, generators and coils.



Rev. 02/24/15

# RuPM™ Room Unit Temperature Sensors

# A11



Ordering Information		RuPM Room Unit - Temperature							
BA/RuPM	Microprocessor Based Room Sensor with Multi-Mode Pushbuttons and LCD Readout								
<b>Display Mode (Must select one)</b>		<b>Pick F (°F) or C (°C) indication</b>							
F	Temperatures Displayed in °F								
C	Temperatures Displayed in °C								
<b>Active Sensor Option</b>		<b>Skip if not required</b>							
-3	3K Thermistor, 3,000 Ω @ 25 °C								
-102	10K-2 Thermistor, 10,000 Ω @ 25 °C								
-103	10K-3 Thermistor, 10,000 Ω @ 25 °C								
-10311	10K-3[11K] Thermistor, 5,238 Ω @ 25 °C, 11kΩ shunt resistor								
<b>Setpoint Configuration Option</b>		<b>If setpoint is required, you must pick a display designator and an output designator.</b>							
- #	<b>SETPOINT DISPLAY RANGE.</b> (Skip if setpoint is not required)								
	<b>Desired Range</b>	<b>Designator</b>	<b>Desired Range</b> <b>Designator</b>						
	-3 to +3	A	55 to 85 °F or 13 to 30 °C      D						
	-5 to +5	B	60 to 80 °F or 15 to 27 °C      E						
	50 to 90 °F or 10 to 32 °C	C	65 to 80 °F or 18 to 27 °C      F						
##	<b>SETPOINT OUTPUT VALUE RANGE</b> (Skip if setpoint is not required.)								
	<b>Desired Range</b>	<b>Designator</b>	<b>Desired Range</b> <b>Designator</b>						
	889 to 111 Ω	20	0 to 20 kΩ      80						
	792 to 208 Ω	21	4.75 k to 24.75 kΩ      81						
	695 to 305 Ω	22	6.19 k to 26.19 kΩ      82						
	674 to 274 Ω	23	7.87 k to 27.87 kΩ      83						
	597 to 305 Ω	24	10 k to 30 kΩ      84						
	800 to 1200 Ω	25	0 to 5 V      00						
	2 k to 3 kΩ	42	0 to 10 V      10						
			<i>Additional output range values are available. See App. Notes page 12 for complete listing.</i>						
<b>Fanspeed/Mode Options - Single resistive output</b> (Skip if not required) (Other modes available, see page 13)									
-XLD <sup>1</sup>	Pushbutton Fanspeed Adjustment [Off (5K), Auto (10K), Lo (15K), Med (20K), Hi (25K)] with LED Indicators								
-X01 <sup>1</sup>	Pushbutton Fanspeed Adjustment [Off (4.89K), Auto (2.33K), Lo (10.63K), Med (13.24K), Hi (16.33K)] with LED Indicators								
-X02 <sup>1</sup>	Pushbutton Fanspeed Adjustment [Off (2K), Auto (4K), Lo (6K), Med (8K), Hi (10K)] with LED Indicators								
-HCF <sup>2</sup>	Pushbutton Mode [Heat/Auto (5K), Off/Auto (10K), Cool/Auto (15K), Heat/On (20K), Off/On (25K), Cool/On (30K)] with LED Indicators								
-H01 <sup>2</sup>	Pushbutton Mode [Heat/Auto (0Ω), Off/Auto (2K), Cool/Auto (4K), Heat/On (6K), Off/On (8K), Cool/On (10K)] with LED Indicators								
<b>Override Configuration</b>		<b>Must select one</b>							
-J	Override as a Separate Output (only available on units without setpoint)								
-N	Override in Parallel (//) with Active Sensor (not available for the direct passive sensor output)								
-P	Override in Parallel (//) with Setpoint (setpoint option required)								
-Z	No Override (needed if no override is required)								
<b>Optional Communication Jack</b> (Mounted in unit's base)									
-C11L	RJ11 (4 pin) Style Jack with Leads Attached								
-C11LT	RJ11 (4 pin) Style Jack with Leads and a Terminal Block Attached								
-C35L	3.5 mm Phono Style Jack with Leads Attached								
-C35LT	3.5 mm Phono Style Jack with Leads and a Terminal Block Attached								
-C22L	RJ22 (4 pin) Style Jack with Leads Attached								
-C22LT	RJ22 (4 pin) Style Jack with Leads and Terminal Block Attached								
<b>Power Available at Panel</b>		<b>Must select one</b>							
-5	Regulated, 5 VDC								
-24	11 to 35 VDC or 15 to 28 VAC (See Power Specifications on opposite page)								
<b>Direct Passive Sensor Option</b>		<b>Skip if not required</b>							
-1375	1K Platinum RTD, 1,000 Ω @ 0 °C, 3.75 Ω/°C temp. coeff.								
-1NI	1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.								
-1	1K Platinum RTD, 1,000 Ω @ 0 °C, 3.85 Ω/°C temp. coeff.								
-2	2K Silicon RTD, 2,000 Ω @ 20 °C, 8 Ω/°C temp. coeff.								
-18	1.8K Thermistor, 1,800 Ω @ 25 °C								
-3	3K Thermistor, 3,000 Ω @ 25 °C								
-33	3.3K Thermistor, 3,300 Ω @ 25 °C								
-102	10K-2 Thermistor, 10,000 Ω @ 25 °C								
-103	10K-3 Thermistor, 10,000 Ω @ 25 °C								
-10311	10K-3[11K] Thermistor, 5,238 Ω @ 25 °C, 11kΩ shunt resistor								
-20	20K Thermistor, 20,000 Ω @ 25 °C								
-50	50K Thermistor, 50,000 Ω @ 25 °C								
-100	100K Thermistor, 100,000 Ω @ 25 °C								
-592	AD592 Semiconductor, 273 μA @ 0 °C								
-ES	External sensor. Order 10K-2 thermistor separately. 24" max (output as active sensor only).								
<b>Optional Test and Balance Switch</b>									
-TB	Three Position Test & Balance Switch - "Low" & "High" values vary, "Normal" is live sensor value, call for details.								
	<b>Optional Copla White Enclosure</b> Warm White is Standard								
-CPW	Copla White Enclosure Color								
<b>EXAMPLE</b>									
BA/RuPM	F	-102	-B21	-XLD	-N	-C11LT	-24	-0	-TB
Example Part Number: BA/RuPMF-102-B21-XLD-N-C11LT-24-0-TB									
<b>Your Part Number:</b>									

All models can be field calibrated so the displayed ambient temperature value matches a reference device (±3°, ½° steps), call for details.  
 All models are Common Ground Only.  
 \*Includes two "Fan" buttons and one "C/F" select button.  
 \*\*Includes one "System" button and one "Fan" button  
 Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.

