

## Humidity & Combination Temp/Humidity Sensors

Rev. 09/08/11

### Features & Options

- Low Profile Delta Style Enclosure
- Humidity Only or Temp./Humidity Combo
- Optional Display
- 2% and 3% RH Accuracies
- Optional Communications Jack
- User Adjustable Toggle Rate Between Temperature and Humidity
- Wide Selection of Temperature Sensing Elements
- Full-range Temperature Compensation of RH Signal
- Two Year Warranty



**Delta Style Enclosures  
with and without Display**

The Delta Style room units are available as Humidity Only sensors or as Combination temperature and humidity sensors. The Delta Style enclosure features an optional display with a user adjustable toggle rate between humidity and temperature and can display in either °C or °F.

The unit is available with the entire line of BAPI temperature sensors. If a temperature transmitter and humidity transmitter are desired, then see the "X-Combo" Unit on pages B12-13 of this section.

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

\* All Passive Thermistors 10K  $\Omega$  and smaller are CE compliant.

### The BAPI-Guard™

- Prevents Tampering, Physical Damage and Unauthorized Adjustment
- Exceptional Airflow for Proper Thermostat Operation
- Two Sizes to Fit Most Thermostats



**BAPI-Guard Mounted  
Over a Thermostat**

(See Accessories for more info.)

### Specifications

**Power:** 10 to 35 VDC (0 - 5 VDC or 4 - 20 mA Outputs)  
15 to 40 VDC (0 - 10 VDC Output)  
12 to 24 VAC (0 - 5 VDC Output)  
15 to 28 VAC (0 - 10 VDC Output)

Note: If AC power is used, it must be shielded from the signal wiring

#### Power Consumption:

22 mA max. DC (0 - 5 VDC or 4 - 20 mA Outputs)  
6 mA max DC (0 - 10 VDC Output)  
0.53 VA max. AC (0 - 5 VDC Output)  
0.14 VA max. AC (0 - 10 VDC Output)

#### Sensing Elements:

Temperature - Thermistor, RTD or Semiconductor  
Humidity - Capacitive Type,  $\pm 2\%$  or  $\pm 3\%$  RH

#### RH Calb. Adjustment: $\pm 5\%$ POT

**Wiring:** 2 to 3 pair of 16 to 22 AWG\*

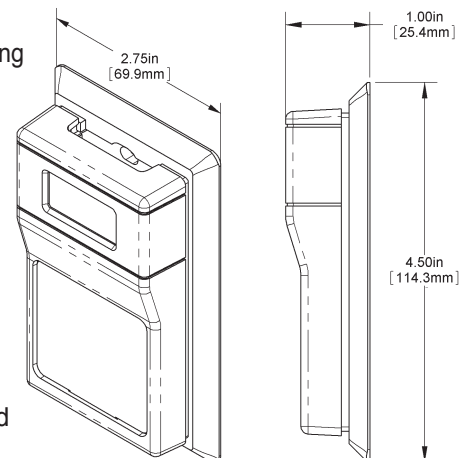
**Mounting:** Standard 2"x4" J-box or drywall mount - screws provided

#### Environmental Operation Range:

Temperature: 32 to 122 °F (0 to 50 °C)  
Humidity: 5 to 95%, non-condensing

**Material:** ABS Plastic

**Material Rating:** UL 94V-HB



\* 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.



# Delta Style Room Units **B15**

## Humidity & Combination Temp/Humidity Sensors

Rev. 09/08/11

Ordering Grids without List Prices are available on our website at [www.bapihvac.com](http://www.bapihvac.com)

Ordering Information		Delta Style Room Unit, Humidity only or Temp./Humidity Combo		List Price	Your Order	
BA/						
<b>Optional Temp. Sensor</b>		<b>Use the designator number, shown to the left in bold. Omit if ordering humidity only</b>				
##-	<b>THERMISTORS</b>		<b>RTDs</b>	<b>Thermistors</b>		
	<b>1.8K</b>	1.8K Ω @ 25 °C	<b>100</b>	100 Ω Platinum @ 0 °C, .385 Ω/°C temp. coeff.	<b>\$18 Each</b>	\$ _____
	<b>2.2K</b>	2.2K Ω @ 25 °C	<b>1K [375]</b>	1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.		
	<b>3K</b>	3K Ω @ 25 °C	<b>1K[Ni]</b>	1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.	<b>RTD's</b>	
	<b>3.25K</b>	3.25K Ω @ 25 °C (T30 type)	<b>1K</b>	1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.	<b>\$25 Each</b>	\$ _____
	<b>3.3K</b>	3.3K Ω @ 25 °C	<b>2K</b>	2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.	<b>or</b>	
	<b>10K-2</b>	10K Ω @ 25 °C			<b>\$35 for 1K[Ni]</b>	\$ _____
	<b>10K-3</b>	10K Ω @ 25 °C				
	<b>10K-3[11K]</b>	5,238 Ω @ 25 °C				
	<b>20K</b>	20K Ω @ 25 °C			<b>Semi-</b>	
	<b>47K</b>	47K Ω @ 25 °C	<b>334</b>	LM334 Semiconductor	<b>conductors</b>	
	<b>50K</b>	50K Ω @ 25 °C	<b>592</b>	AD592 Semiconductor, 273 μA @ 0 °C	<b>\$25 Each</b>	\$ _____
	<b>100K</b>	100K Ω @ 25 °C				
	<b>TEMPERATURE TRANSMITTERS</b>					
			<a href="#">See X-Combo Unit on pages B12-13</a>			
<b>Humidity Transmitter</b>		<b>Must select one</b>				
<b>H200</b>	±2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA*			<b>\$260</b>	\$ _____	
<b>H210</b>	±2% Humidity Transmitter with 0 to 10 V Output			<b>\$260</b>	\$ _____	
<b>H300</b>	±3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA*			<b>\$240</b>	\$ _____	
<b>H310</b>	±3% Humidity Transmitter with 0 to 10 V Output			<b>\$240</b>	\$ _____	
<b>Delta Style Enclosure</b>		<b>Must select</b>				
	<b>-R</b>	Delta Style Room Enclosure				
		<b>Optional LCD Display</b> Omit if ordering a unit without display				
	<b>D</b>	LCD Display		<b>\$35</b>	\$ _____	
		<b>Optional Test &amp; Balance</b> Skip if not required				
	<b>-TB</b>	Three Position Switch - "Low" & "High" values vary, "Normal" is live sensor value. Call for details.		<b>\$7.50</b>	\$ _____	
		<b>Optional Comm. Jack</b> Mounted in unit's base				
	<b>-C35L</b>	3.5 mm Phono Jack w/ Leads Attached		<b>\$10</b>	\$ _____	
	<b>-C35LT</b>	3.5 mm Phono Jack w/ Leads & Terminal Block		<b>\$10</b>	\$ _____	
		<b>Optional Copla White Enclosure</b> (Warm White is Standard)				
	<b>-CPW</b>	Copla White Enclosure Color				
<b>EXAMPLE</b>						
BA/	<b>10K-2</b>	<b>H200</b>	<b>-R</b>	<b>D</b>	<b>-C35L</b>	
Example Part Number: BA/10K-2-H200-RD-35L				<b>Total =</b>	\$ _____	
<b>Your Part Number:</b>						

\*DC input voltage is required for current output.

See the "X-Combo" Unit on page B12-13 for more Temperature Transmitter & Humidity Transmitter combination options.

Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.