

## Humidity & Combination Temp/Humidity Sensors

Rev. 06/05/07

### Features & Options

- Low Profile Delta Style Enclosure
- Humidity Only or Temp./Humidity Combo
- LCD Readout (optional)
- 2% and 3% RH Accuracies
- Communications Jack (optional)
- 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 LCD 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 LCD 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. In addition, these units save time and money by allowing for field replacement of humidity elements without recalibration. If a temperature transmitter and humidity transmitter are desired, then see the "X-Combo" Unit on page B8-9 of this section.

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

\*Some items may not be CE compliant, call BAPI for additional information.

### 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:** 15 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)

**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 - Impedance Type, ±2% or ±3% RH

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

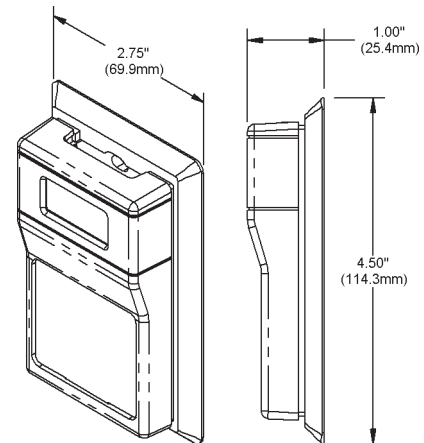
**Mounting:** Standard 2"x4" J-box or drywall mount - screws provided

**Environmental Operation Range:**

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

**Material:** ABS Plastic

**Material Rating:** UL 94, V-0



**Delta Style Enclosure**

\* 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.

Ordering Information		Delta Style Room Unit, Humidity only or Temp./Humidity Combo			
BA/					
	<b>Temperature Sensor</b>	Use the designator number, shown to the left in bold. Omit if ordering humidity unit only			
##-		<b>THERMISTORS</b>		<b>RTDs</b>	
	<b>1.8K</b>	1.8K $\Omega$ @ 25 °C	<b>100</b>	100 $\Omega$ Platinum @ 0 °C, .385 $\Omega$ /°C temp. coeff.	
	<b>3K</b>	3K $\Omega$ @ 25 °C	<b>100(3W)</b>	3 Wire 100 $\Omega$ Plat. @ 0 °C, .385 $\Omega$ /°C temp. coeff.	
	<b>3.3K</b>	3.3K $\Omega$ @ 25 °C	<b>1K (375)</b>	1K $\Omega$ Platinum @ 0 °C, 3.75 $\Omega$ /°C temp. coeff.	
	<b>10K-2</b>	10K $\Omega$ @ 25 °C	<b>1K(Ni)</b>	1K $\Omega$ Nickel @ 21°C, 5 $\Omega$ /°C temp. coeff.	
	<b>10K-3</b>	10K $\Omega$ @ 25 °C	<b>1K</b>	1K $\Omega$ Platinum @ 0 °C, 3.85 $\Omega$ /°C temp. coeff.	
	<b>10K-3(11K)</b>	5,238 $\Omega$ @ 25 °C	<b>2K</b>	2K $\Omega$ Silicon @ 20 °C, 8 $\Omega$ /°C temp. coeff.	
	<b>20K</b>	20K $\Omega$ @ 25 °C			
	<b>50K</b>	50K $\Omega$ @ 25 °C			
	<b>100K</b>	100K $\Omega$ @ 25 °C	<b>334</b>	<b>SEMICONDUCTORS</b> LM334 Semiconductor	
			<b>592</b>	AD592 Semiconductor, 273 $\mu$ A @ 0 °C	
		<b>TEMPERATURE TRANSMITTERS</b>			
	<b>T10K - Note</b>	See T10K Specific ordering grid on page B27			
	<b>Humidity Transmitter</b>				
	<b>H200</b>	$\pm$ 2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA*			
	<b>H210</b>	$\pm$ 2% Humidity Transmitter with 0 to 10 V Output			
	<b>H300</b>	$\pm$ 3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA*			
	<b>H310</b>	$\pm$ 3% Humidity Transmitter with 0 to 10 V Output			
	<b>Delta Style Enclosure</b>				
	<b>-R</b>	Delta Style Room Enclosure			
	<b>LCD Display</b> Omit if ordering a unit without display				
	<b>D</b>	LCD Display			
	<b>Optional Comm. Jack</b> Mounted in unit's base				
	<b>-C35L</b>	3.5 mm Phono Jack w/ Leads Attached			
	<b>-C35LT</b>	3.5 mm Phono Style Jack with Leads and			
<b>EXAMPLE</b>					
<b>BA/</b>	<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>Your Part Number:</b>					

\*DC input voltage is required for current output.

See the "X-Combo" Unit on page B8-9 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.

## VC75 - AC to DC Voltage Converter

BAPI recommends using DC voltage on room sensors for a more stable reading. With its compact size and rugged design, BAPI's VC75 is the perfect AC to DC converter. Besides the 75 mA model (VC75), BAPI also offers 100 mA and 350 mA models, all of which are snaptrack mountable. For more info, see the Accessories section.



VC75 mounted in optional snaptrack