



### Features & Options

- 10 Points of Calibration from 10 to 90% RH
- Three Enclosure Styles
- Humidity Only or Temp./Humidity Combination
- Replaceable Filter
- 2% and 3% RH Accuracies
- Wide Selection of Temp. Sensing Elements

Humidity control is an important aspect of any climate control system. Therefore, humidity sensors must be both accurate and dependable. BAPI's humidity transmitters are calibrated at 10 points from 10 to 90% RH for accuracy, eliminating field calibration. The Outside Air Units are also extremely dependable, featuring three of the most watertight enclosures available today.

The cast aluminum Weatherproof enclosure carries a NEMA 3R, while the BAPI-Box and BAPI-Box 2 are made of UV-resistant polycarbonate and carry an IP66 rating.

All Outside Air Units are built to withstand high humidity and condensation and perform in the real world. This is especially important in an Outside Air Unit which can be exposed to rain, snow and large temperature swings.

**Replacement Filter** - The 80 micron sintered stainless steel filter protects the sensor from contamination while allowing airflow. See "Accessories" for more info.



### Specifications

#### Power and Consumption:

- 10 to 35 VDC, 22 mA max. (for units with 0 to 5 VDC or 4 to 20 mA Humidity Outputs)
- 15 to 35 VDC, 6 mA max. (for units with 0 to 10 VDC Humidity Output)
- 12 to 27 VAC, 0.53 VA max. (for units with 0 to 5 VDC Humidity Outputs)
- 15 to 27 VAC, 0.14 VA max. (for units with 0 to 10 VDC Humidity Output)

#### Encl. Dimensions:

#### H x W x D

- BAPI-Box (BB) 5 x 4.1 x 2.5" (127 x 104 x 63.5mm)
- BAPI-Box 2 (BB2) 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)
- Weatherproof (WP) 4.5 x 2.75 x 2.2" (114 x 70 x 55mm)

(For enclosure dimension drawings, turn to the end of the section.)

#### Sensor:

- Humidity: Capacitive 2% or 3% RH (10 to 90% RH @ 23°C)
- Temp: Thermistor, Semiconductor RTD or Temp Transmitter

#### Enclosure Material:

- WP Model: Cast Aluminum
- BB & BB2: UV-resistant Polycarbonate, UL 94, V-0

#### Environmental Operation Range:

- Temp: -40 to 158°F (-40 to 70°C)
- Humidity: 0% to 100% RH
- Fully Temperature Compensated

#### Enclosure Rating:

- WP Model: NEMA 3R
- BB & BB2: IP66, NEMA 4

Note: See installation sheets for full specifications.

**For detailed specifications on the Sensors & Transmitters, see the "Sensors" section.**





Rev. 01/12/16

# Outside Air Units

# B19

## Humidity or Combination Temp/Humidity Sensors

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

Ordering Information			Outside Air Units - Humidity or Combination Temp. & Humidity	List Price	Your Order
BA/					
Optional Temp. Sensor	Use the designator number (shown to the left in bold) to indicate the sensor				
##-	<b>THERMISTORS</b>	<b>RTDs</b>		<b>Thermistors</b>	
1.8K	1.8K Ω @ 25 °C	1K[375]	1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.	\$18 Each	\$ _____
3K	3K Ω @ 25 °C	1K[Ni]	1K Ω Nickel @ 21 °C, 5 Ω/°C temp. coeff.	<b>RTD's</b>	
3.25K	3.25K Ω @ 25 °C (T30 type)	1K	1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.	\$25 Each	
3.3K	3.3K Ω @ 25 °C	2K	2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.	or	\$ _____
10K-2	10K Ω @ 25 °C			\$35 for 1K[Ni]	
10K-3	10K Ω @ 25 °C	<b>SEMICONDUCTORS</b>		<b>Semi-conductors</b>	
10K-3[11K]	5,238 Ω @ 25 °C	334	LM334 Semiconductor	\$25 Each	\$ _____
20K	20K Ω @ 25 °C	592	AD592 Semiconductor, 273 μA @ 0 °C		
50K	50K Ω @ 25 °C	592-10K	AD592 Semicond. with 10 kΩ shunt resistor, 2.73 V @ 0 °C		
100K	100K Ω @ 25 °C				
	<b>TEMPERATURE TRANSMITTERS</b>	<i>Must include a "range" figure</i>		<b>Temperature Transmitters</b>	
T1K[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output*			\$125 for	
T1KM[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*			T1K or T10K	\$ _____
T10K[range]	10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output*				
T10K5[range]	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 VDC Output*				
T10K10[range]	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 10 VDC Output*				
	<b>TEMPERATURE TRANSMITTER RANGES</b>	Custom temperature transmitter ranges are available. Common ranges are listed below		\$280 for	
	40 TO 90F	4 TO 32C	-30 TO 130F	T1KM	\$ _____
	0 TO 100F	-18 TO 38C	32 TO 212F		
	20 TO 120F	-7 TO 48C	30 TO 234F		
	32 TO 134F	0 TO 57C	-1 TO 112C		
	<b>Humidity Transmitter (Required)</b>				
H200	±2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA			\$240	\$ _____
H210	±2% Humidity Transmitter with 0 to 10 V Output			\$240	\$ _____
H212	±2% Humidity Transmitter with 2 to 10 V Output			\$240	\$ _____
H300	±3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA			\$240	\$ _____
H310	±3% Humidity Transmitter with 0 to 10 V Output			\$240	\$ _____
H312	±3% Humidity Transmitter with 2 to 10 V Output			\$240	\$ _____
	<b>Enclosure (Required)</b>				
	-O-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate		\$12	\$ _____
	-O-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate*		\$12	\$ _____
	-O-WP	Weatherproof Enclosure - NEMA 3R rated metal enclosure*		\$12	\$ _____
EXAMPLE					
BA/	10K-2-	H200	-O-BB		
Example Part Number: BA/10K-2-H200-O-BB				Total =	\$ _____
Your Part Number:					

\*Note: Units with a temperature transmitter and a humidity transmitter require a doublegang O-WP enclosure or O-BB enclosure. Dual transmitter units are not available with the O-BB2 enclosure.

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

### Doublegang Weatherproof Enclosure

Units with a Temperature Transmitter and a Humidity Transmitter require a doublegang Weatherproof (O-WP) enclosure or BAPI-Box (O-BB) enclosure and are not available in the BAPI-Box 2 (O-BB2) enclosure.



Doublegang Weatherproof Enclosure

