



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 Information		Outside Air Units - Humidity or Combination Temp. & Humidity	
BA/			
	Optional Temp. Sensor	Use the designator number (shown to the left in bold) to indicate the sensor	
##-		THERMISTORS	RTDs
	1.8K	1.8K Ω @ 25 °C	1K[375] 1K Ω Platinum @ 0 °C, 3.75 Ω /°C temp. coeff.
	3K	3K Ω @ 25 °C	1K[Ni] 1K Ω Nickel @ 21°C, 5 Ω /°C temp. coeff.
	3.25K	3.25K Ω @ 25 °C (T30 type)	1K 1K Ω Platinum @ 0 °C, 3.85 Ω /°C temp. coeff.
	3.3K	3.3K Ω @ 25 °C	2K 2K Ω Silicon @ 20 °C, 8 Ω /°C temp. coeff.
	10K-2	10K Ω @ 25 °C	
	10K-3	10K Ω @ 25 °C	
	10K-3[11K]	5,238 Ω @ 25 °C	
	20K	20K Ω @ 25 °C	SEMICONDUCTORS
	50K	50K Ω @ 25 °C	334 LM334 Semiconductor
	100K	100K Ω @ 25 °C	592 AD592 Semiconductor, 273 μ A @ 0 °C
			592-10K AD592 Semicond. with 10 k Ω shunt resistor, 2.73 V @ 0 °C
		TEMPERATURE TRANSMITTERS	<i>Must include a "range" figure</i>
	T1K[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output*	
	T1KM[range]	1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*	
	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*	
		TEMPERATURE TRANSMITTER RANGES	
		Custom temperature transmitter ranges are available. Common ranges are listed below	
		40 TO 90F	4 TO 32C
		0 TO 100F	-18 TO 38C
		20 TO 120F	-7 TO 48C
		32 TO 134F	0 TO 57C
		-30 TO 130F	-34 TO 54C
		32 TO 212F	0 TO 100C
		30 TO 234F	-1 TO 112C
		Humidity Transmitter (Required)	
	H200	\pm 2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA	
	H210	\pm 2% Humidity Transmitter with 0 to 10 V Output	
	H212	\pm 2% Humidity Transmitter with 2 to 10 V Output	
	H300	\pm 3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA	
	H310	\pm 3% Humidity Transmitter with 0 to 10 V Output	
	H312	\pm 3% Humidity Transmitter with 2 to 10 V Output	
		Enclosure (Required)	
		-O-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate
		-O-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate*
		-O-WP	Weatherproof Enclosure - NEMA 3R rated metal enclosure*
EXAMPLE			
BA/	10K-2-	H200	-O-BB
Example Part Number: BA/10K-2-H200-O-BB			
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

