



Features & Options

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

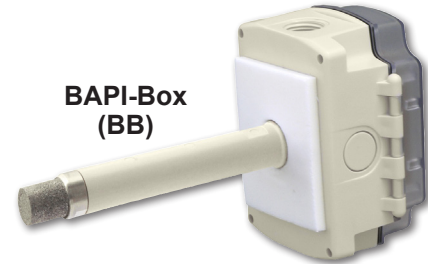
Humidity control is an important aspect of any climate control system. Therefore, humidity sensors must be both accurate and dependable. BAPI's humidity transmitters are calibrated at 10 points from 10 to 90% RH for accuracy, eliminating field calibration. The Duct Units are also extremely dependable, featuring three of the most watertight enclosures available today: the polycarbonate BAPI-Box and BAPI-Box 2 and the cast aluminum WP enclosure.

All Duct Units feature closed cell foam to seal the insertion hole and to absorb vibration. Mounting tabs allow for easy installation to the wall of the duct. The units are built to withstand high humidity and condensation and perform in the real world.

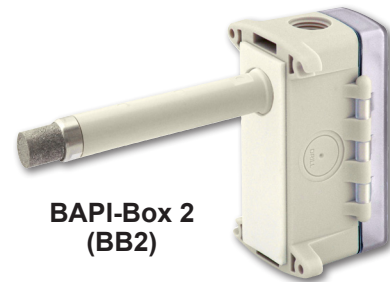
Replacement Filter - The 80 micron sintered stainless steel filter protects the sensor from contamination while allowing airflow. See "Accessories" for more info.



Weatherproof
(WP)



BAPI-Box
(BB)



BAPI-Box 2
(BB2)

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

Note: See installation sheets for full specifications.

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





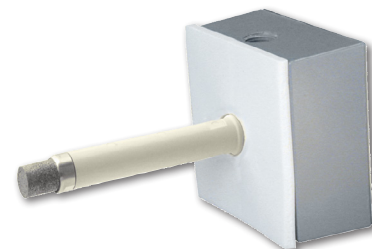
Ordering Information		Duct Units - Humidity or Combination Temp. & Humidity																	
BA/																			
	Optional Sensor Type	Use the designator number (shown to the left in bold) to indicate the sensor																	
##-		<p>THERMISTORS</p> <p>1.8K 1.8K Ω @ 25 °C</p> <p>3K 3K Ω @ 25 °C</p> <p>3.25K 3.25K Ω @ 25 °C (T30 type)</p> <p>3.3K 3.3K Ω @ 25 °C</p> <p>10K-2 10K Ω @ 25 °C</p> <p>10K-3 10K Ω @ 25 °C</p> <p>10K-3[11K] 5,238 Ω @ 25 °C</p> <p>20K 20K Ω @ 25 °C</p> <p>50K 50K Ω @ 25 °C</p> <p>100K 100K Ω @ 25 °C</p> <p>TEMPERATURE TRANSMITTERS <i>Must include a "range" figure</i></p> <p>T1K[range] 1K Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output*</p> <p>T1KM[range] 1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*</p> <p>T10K[range] 10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output*</p> <p>T10K5[range] 10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 VDC Output*</p> <p>T10K10[range] 10K Thermistor, 10,000 Ω @ 25 °C with 0 to 10 VDC Output*</p> <p>STANDARD TEMPERATURE TRANSMITTER RANGES</p> <table border="1"> <tr> <td>40 TO 90F</td> <td>-30 TO 130F</td> <td>4 TO 32C</td> <td>-34 TO 54C</td> </tr> <tr> <td>0 TO 100F</td> <td>32 TO 212F</td> <td>-18 TO 38C</td> <td>0 TO 100C</td> </tr> <tr> <td>20 TO 120F</td> <td>30 TO 234F</td> <td>-7 TO 48C</td> <td>-1 TO 112C</td> </tr> <tr> <td>32 TO 134F</td> <td></td> <td>0 TO 57C</td> <td></td> </tr> </table>	40 TO 90F	-30 TO 130F	4 TO 32C	-34 TO 54C	0 TO 100F	32 TO 212F	-18 TO 38C	0 TO 100C	20 TO 120F	30 TO 234F	-7 TO 48C	-1 TO 112C	32 TO 134F		0 TO 57C		<p>RTDs</p> <p>1K[375] 1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.</p> <p>1K[Ni] 1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.</p> <p>1K 1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.</p> <p>2K 2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.</p> <p>SEMICONDUCTORS</p> <p>334 LM334 Semiconductor</p> <p>592 AD592 Semiconductor, 273 μA @ 0 °C</p> <p>592-10K AD592 Semiconductor with 10 kΩ shunt resistor, 2.73 V @ 0 °C</p>
40 TO 90F	-30 TO 130F	4 TO 32C	-34 TO 54C																
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	Humidity Transmitter (Required)																		
	H200	±2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA																	
	H210	±2% Humidity Transmitter with 0 to 10 V Output																	
	H212	±2% Humidity Transmitter with 2 to 10 V Output																	
	H300	±3% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA																	
	H310	±3% Humidity Transmitter with 0 to 10 V Output																	
	H312	±3% Humidity Transmitter with 2 to 10 V Output																	
	Enclosure (Required)																		
	-D-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate																	
	-D-BB2	BAPI-Box 2 Enclosure - IP66 rated, UV-resistant polycarbonate*																	
	-D-WP	Weatherproof Enclosure - NEMA 3R rated metal enclosure*																	
EXAMPLE																			
BA/	10K-2-	H200	D-BB																
Example Part Number: BA/10K-2-H200-D-BB																			
Your Part Number:																			

*Note: Units with a temperature transmitter and a humidity transmitter require a doublegang D-WP enclosure or D-BB enclosure. Dual transmitter units are not available with the D-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 (D-WP) enclosure or BAPI-Box (D-BB) enclosure and are not available in the BAPI-Box 2 (D-BB2) enclosure.



Doublegang Weatherproof Enclosure