

Features & Options



- Etched Teflon Leadwires & Double Encapsulated Sensors
- Three Enclosure Styles
- Humidity Only or Temp./Humidity Combination
- Replaceable Filter & Humidity Probe
- 2% and 3% RH Accuracies
- Wide Selection of Temp. Sensing Elements
- Two Year Warranty



Humidity control is an important aspect of any climate control system. Therefore, humidity sensors must be both accurate and dependable. **BAPI's** humidity sensors are prescreened for accuracy, eliminating field calibration even when replacing a sensor or probe. The Outside Air Units are also extremely dependable, featuring three of the most watertight enclosures available today.

The Weather Tight (**EU**) enclosure is made from a flame-retardant polymer that carries an IP66 rating. Outside air units are also available in a cast aluminum Weatherproof (**WP**) enclosure that carries a NEMA 3R or the BAPI-Box (**BB**) which is made of UV-resistant polycarbonate and carries an IP66 rating. Optional liquid-tight fittings are available.

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

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



Specifications

Power:

10 to 35 VDC (0 - 5 VDC or 4 - 20 mA Outputs)
 15 to 35 VDC (0 - 10 VDC Output)
 12 to 24 VAC (0 - 5 VDC Outputs)
 15 to 24 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)

Enclosure Rating:

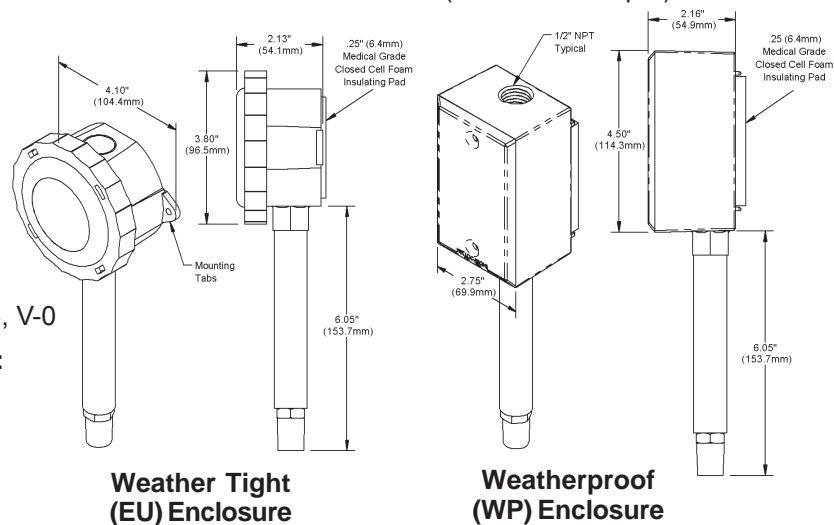
WP Model: NEMA 3R
 EU Model: IP66
 BB Model: IP66

Encl. Material:

WP Model: Cast Aluminum
 EU Model: ABS Plastic, UL 94, V-0
 BB Model: UV-resistant Polycarbonate, UL 94, V-0

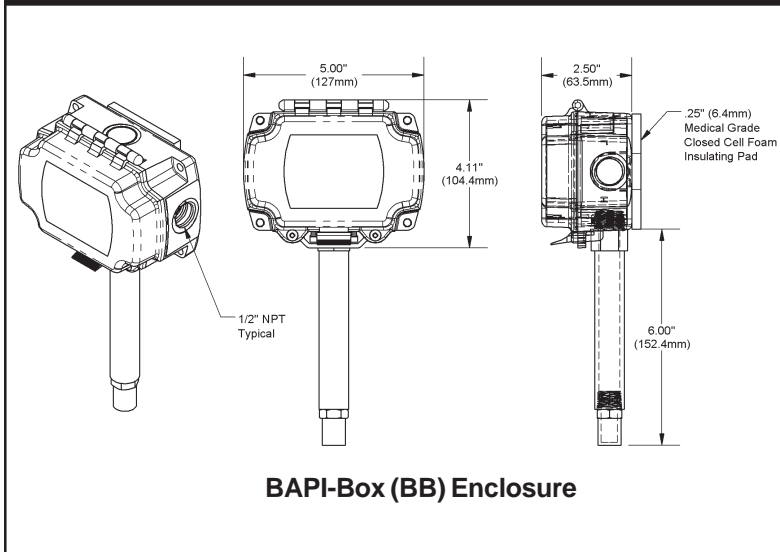
Environmental Operation Range:

Temp: -30 °C to 70 °C
 Humidity: 0% to 100% RH



Rev. 06/05/07

Specifications



Doublegang O-WP Enclosure
 (Units with a T100 or T1K Transmitter and a Humidity Transmitter require a doublegang O-WP enclosure or BAPI-Box enclosure and are not available in the O-EU enclosure. Units with a T10K transmitter and 4-20 mA or 0-5V output do not require a doublegang O-WP enclosure.)

Ordering Information		Outside Air Units - Humidity or Combination Temp. & Humidity																	
BA/																			
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>3.3K 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>RTDs</p> <p>100 100 Ω Platinum @ 0 °C, .385 Ω/°C temp. coeff.</p> <p>100(3W) 3 Wire 100 Ω Plat. @ 0 °C, .385 Ω/°C temp. coeff.</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 Semicond. w/ 10 kΩ shunt resistor, 2.73 V @ 0 °C</p>																	
	<p>TEMPERATURE TRANSMITTERS <i>Must include a "range" figure</i></p> <p>T100[range] 100 Platinum RTD, 100 Ω @ 0 °C with 4 to 20 mA Output*</p> <p>T100M[range] 100 Platinum RTD, 100 Ω @ 0 °C with MATCHED 4 to 20 mA Output*</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 - Note See T10K Specific ordering grid on page B28</p>																		
	<p>TEMPERATURE TRANSMITTER RANGES</p> <p>Custom temperature transmitter ranges are available. Common ranges are listed below</p> <table border="0"> <tr> <td>40 TO 90F</td> <td>4 TO 32C</td> <td>-30 TO 130F</td> <td>-34 TO 54C</td> </tr> <tr> <td>0 TO 100F</td> <td>-18 TO 38C</td> <td>32 TO 212F</td> <td>0 TO 100C</td> </tr> <tr> <td>20 TO 120F</td> <td>-7 TO 48C</td> <td>30 TO 234F</td> <td>-1 TO 112C</td> </tr> <tr> <td>32 TO 134F</td> <td>0 TO 57C</td> <td></td> <td></td> </tr> </table>	40 TO 90F	4 TO 32C	-30 TO 130F	-34 TO 54C	0 TO 100F	-18 TO 38C	32 TO 212F	0 TO 100C	20 TO 120F	-7 TO 48C	30 TO 234F	-1 TO 112C	32 TO 134F	0 TO 57C				
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	Humidity Transmitter																		
	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																	
	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																	
	Enclosure																		
	-O-BB	BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate																	
	-O-EU	Weather Tight Enclosure - IP66 rated UV-resistant enclosure																	
	-O-EUD	Weather Tight Enclosure - IP66 rated UV-resistant enclosure (Probe is attached to the base of the enclosure, similar to a duct sensor)																	
	-O-WP	Weatherproof Enclosure - NEMA 3R rated metal enclosure																	
EXAMPLE																			
BA/	10K-2-	H200	-O-EU																
Example Part Number: BA/10K-2-H200-O-EU																			
Your Part Number:																			

Units with a T100 or T1K transmitter and a humidity transmitter require a doublegang O-WP enclosure or BAPI-Box enclosure.

*Note: The T100 and T1K Transmitters are not available with the O-EU enclosure.

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