Features & Options

- 10 Points of Calibration from 10 to 90%RH
- Humidity Only or Temp./Humidity Combination
- Replaceable Filter
- ±2% and ±3%RH Accuracies
- BAPI-Box 2 or BAPI-Box Enclosure Styles
- 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 Outside Air Units are also extremely dependable, featuring two of the most watertight enclosures available today. The BAPI-Box and BAPI-Box 2 are made of UV-resistant polycarbonate and carry an IP66 rating. The BAPI-Box is only available for units with a temperature transmitter and a humidity transmitter.
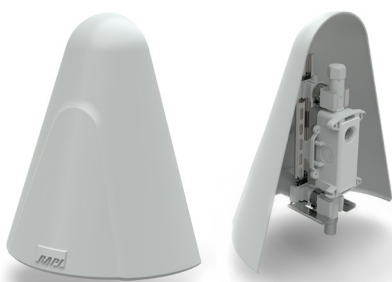

BAPI-Box 2 Enclosure

BAPI-Box Enclosure

Weather Shade

External temperature, humidity and air quality sensors are affected by radiant heat from the surfaces of buildings and parking lots. The BAPI Weather Shade effectively blocks the radiant heat, improving the accuracy of the sensor.

(See Accessories for more info.)

Specifications

Power:
10 to 35 VDC, 22 mA max ....For units with 0 to 5 or 1 to 5 VDC or 4 to 20 mA Humidity Outputs
15 to 35 VDC, 6 mA max ....For units with 0 to 10 or 2 to 10 VDC Humidity Output
12 to 27 VAC, 0.53 VA max ....For units with 0 to 5 or 1 to 5 VDC Humidity Outputs
15 to 27 VAC, 0.14 VA max ....For units with 0 to 10 or 2 to 10 VDC Humidity Output

Enclosure Dimensions: H x W x D
BAPI-Box ....5 x 4.1 x 2.5" (127 x 104 x 63.5mm)
BAPI-Box 2: ....4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)
(For enclosure dimension drawings, turn to the end of the section.)

Sensor:
2% Humidity: Capacitive ±2% (10 to 80% RH @ 25°C)
                            ±3% (80 to 90% RH @ 25°C)
3% Humidity: Capacitive ±3% (10 to 90% RH @ 25°C)
Temp: Thermistor or RTD (See Sensors section for specs)

Enclosure Rating: IP66, NEMA 4

Enclosure Material:
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

Use the Option Selection Guides below to create your custom part number. Replace the number and parenthesis with the designator for each selection. Skip the designator and dashes for optional selections that are not required in your configuration. Additional options are available but not shown above. Contact BAPI for the complete list of options.

Option Selection Guide
Outside Air Units with Optional Temperature Sensor

BA/ (**#1**) - (**#2**) - (**#3**)

#1: Temp Sensor (Optional)
1.8K ....1.8K Thermistor
3K ....3K Thermistor
10K-2 ....10K-2 Thermistor
10K-3 ....10K-3 Thermistor
10K-3[11K]...10K-3[11K] Thermistor
20K ....20K Thermistor

1K[375] ....1K Plat. RTD (375 curve)
1K ....1K Plat. RTD (385 curve)
1K[NI]...........1K Nickel RTD

#2: Humidity Output (Required)
H200... ±2% Accuracy, 0 to 5V Output
H215... ±2% Accuracy, 1 to 5V Output*
H210... ±2% Accuracy, 0 to 10V Output
H212... ±2% Accuracy, 2 to 10V Output*
H220... ±2% Accuracy, 4 to 20mA Output

H300... ±3% Accuracy, 0 to 5V Output
H315... ±3% Accuracy, 1 to 5V Output*
H310... ±3% Accuracy, 0 to 10V Output
H312... ±3% Accuracy, 2 to 10V Output*
H320... ±3% Accuracy, 4 to 20mA Output

#3: Enclosure (Required)
O-BB2....BAPI-Box 2 (IP66, NEMA 4)
O-BB......BAPI-Box (IP66, NEMA 4)

Example Number:
BA/(**10K-2**) - (**H200**) - (**O-BB2**)
BA/10K-2-H200-O-BB2 (no parenthesis)

Description: 10K-2 Thermistor, ±2%RH with 4 to 20mA Output, BAPI-Box 2 Enclosure

Option Selection Guide
Outside Air Units with a Temperature Transmitter

BA/ (**#1**)(**#2**) - (**#3**) - (**#4**) - (**#5**)

#1: Temp Transmitter (Required)
T1K.................. 4 to 20mA Output
TXS05.............. 0 to 5V Output*
TXS10.............. 0 to 10V Output*
TXS12.............. 2 to 10V Output*
TXS15.............. 1 to 5V Output*

#2: Temperature Range (Required)
[32 TO 212F] ... 32 to 212°F Range
[20 TO 120F] ... 20 to 120°F Range
[0 TO 100F] ..... 0 to 100°F Range
[0 TO 100C] ..... 0 to 100°C Range
[-7 TO 49C]...... -7 to 49°C Range
[-18 TO 38C].... -18 to 38°C Range

#3: Probe Length (Required)
H200... ±2% Accuracy, 0 to 5V Output
H215... ±2% Accuracy, 1 to 5V Output
H210... ±2% Accuracy, 0 to 10V Output
H212... ±2% Accuracy, 2 to 10V Output
H220... ±2% Accuracy, 4 to 20mA Output

H300... ±3% Accuracy, 0 to 5V Output
H315... ±3% Accuracy, 1 to 5V Output
H310... ±3% Accuracy, 0 to 10V Output
H312... ±3% Accuracy, 2 to 10V Output
H320... ±3% Accuracy, 4 to 20mA Output

#4: BAPI-Box Enclosure (Required)
O-BB.... BAPI-Box (IP66, NEMA 4)

*Voltage outputs are field selectable

Example Number:
BA/(**T1K**)(**[0 TO 100F]**) - (**H200**) - (**O-BB**)
BA/T1K[0 TO 100F]-H200-O-BB (no parenthesis)

Description: Temperature Transmitter with 4 to 20mA Output and 0 to 100°F Range, ±2%RH with 4 to 20mA Output, BAPI-Box Enclosure

Your Number: BA/