

### 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.

### 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.)



**BAPI-Box 2 Enclosure**



**BAPI-Box Enclosure**  
(only available for units with a humidity and temperature transmitter)

### 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)

#### 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:

Humidity:

Capacitive 2% or 3%RH  
(10 to 90% RH @ 23°C)

Temperature:

Thermistor or RTD

(See Sensors section for specs)

#### Enclosure Rating:

IP66, NEMA 4

#### Enclosure Material:

UV-res. 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 Guide 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.

**Outside Air Humidity Sensor Option Selection Guide**

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

**#1: Temperature Sensor or Transmitter (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 Platinum RTD (375 curve)
- 1K[Ni] ..... 1K Ω Nickel RTD
- 1K ..... 1K Platinum RTD (385 curve)

Temperature Transmitters below require a BAPI-Box Enclosure

- T1K[32 TO 212F] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 32 to 212°F Range
- T1K[20 TO 120F] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 20 to 120°F Range
- T1K[0 TO 100F] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 0 to 100°F Range
- T1K[0 TO 100C] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, 0 to 100°C Range
- T1K[-7 TO 49C] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, -7 to 49°C Range
- T1K[-18 TO 38C] ..... 1K Plat. RTD Transmitter, 4 to 20 mA Output, -18 to 38°C Range

*Matched Transmitters are also available. Contact your BAPI representative for ordering.*

**#2: Humidity Output (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

**#3: Enclosure Style (required)**

- O-BB2 ..... BAPI-Box 2 (IP66, NEMA 4X)
- O-BB ..... BAPI-Box (for units with a humidity and temp transmitter only) (IP66, NEMA 4X)

**Example Number:** BA/( **10K-2** ) - ( **H200** ) - ( **O-BB2** )

**Actual Number (with parenthesis removed):** BA/10K-2-H200-O-BB2

**Description:** 10K-2 Thermistor, 0 to 5V or 4 to 20mA Humidity Output, BAPI-Box 2 Enclosure.

Your Number: BA/

