

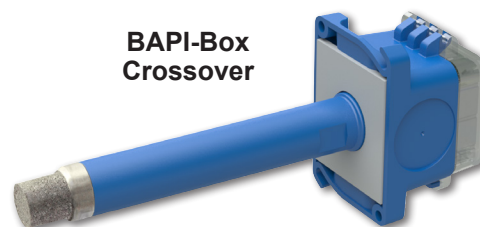


## Features & Options

- 10 Points of Calibration from 10 to 90% RH
- Humidity Only or Temp./Humidity Combination
- Replaceable Stainless Steel Filter
- Green Power Indication LED on BAPI-Box Crossover Units
- $\pm 2\%$  and  $\pm 3\%$  RH Accuracies

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 two of the most watertight enclosures available today. The BAPI-Box and BAPI-Box Crossover Enclosures 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.

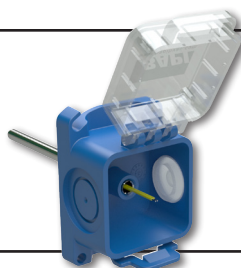


**BAPI-Box Crossover**



**BAPI-Box**

(only available for units with a temperature transmitter and a humidity transmitter)



## The BAPI-Box Crossover Enclosure

The BAPI-Box Crossover features a hinged cover with thumb latch for easy termination. A pierceable knockout plug is available for the open port. See the Accessories section for more info.

*(Unit shown with knockplug plug sold separately.)*

## 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 Output  
 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 Output  
 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 Crossover: ..... 3.1 x 2.2 x 1.9" (79 x 56 x 49mm)  
 BAPI-Box ..... 5 x 4.1 x 2.5" (127 x 104 x 63.5mm)

*(For enclosure dimension drawings, turn to the end of the section.)*

### Sensor:

2% Humidity: Capacitive  $\pm 2\%$  (10 to 80% RH @ 25°C)  
 $\pm 3\%$  (80 to 90% RH @ 25°C)

3% Humidity: Capacitive  $\pm 3\%$  (10 to 90% RH @ 25°C)

Temp: Thermistor or RTD (See Sensors section for specs)

### Enclosure Rating:

BAPI-Box Crossover: IP10, NEMA 1 (IP44 with knockout plug)  
 BAPI-Box: IP66, NEMA 4X

### BAPI-Box Crossover Material:

Cover: Polycarbonate, UL94 V-0  
 Base: Nylon, UL94 HB

### BAPI-Box Material:

UV-resistant Polycarbonate, UL94 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.

### Duct 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 $\Omega$ 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 Output of 0 to 5 V
H215 .....	±2% Humidity Transmitter with Output of 1 to 5 V *
H210 .....	±2% Humidity Transmitter with 0 to 10 V Output
H212 .....	±2% Humidity Transmitter with 2 to 10 V Output *
H220 .....	±2% Humidity Transmitter with Output of 4 to 20mA
H300 .....	±3% Humidity Transmitter with Output of 0 to 5 V
H315 .....	±3% Humidity Transmitter with Output of 1 to 5 V *
H310 .....	±3% Humidity Transmitter with 0 to 10 V Output
H312 .....	±3% Humidity Transmitter with 2 to 10 V Output *
H320 .....	±3% Humidity Transmitter with Output of 4 to 20mA

#### #3: ENCLOSURE STYLE (REQUIRED)

D-BBX .....	BAPI-Box Crossover (IP10, NEMA 1)
D-BB .....	BAPI-Box (for units with a humidity and temperature transmitter only)

*\*Not available with the BAPI-Box Crossover Enclosure*

*Additional options are available but not shown above. Contact BAPI for the complete list of options. Submittal sheets without pricing can be downloaded from our website at [www.bapihvac.com](http://www.bapihvac.com)*

**Example Number:** BA/( 10K-2 ) - ( H200 ) - ( D-BBX )

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

**Description:** 10K-2 Thermistor, 0 to 5V or 4 to 20mA Humidity Output, BAPI-Box Crossover IP10-rated Enclosure.

**Your Number:** BA/

