

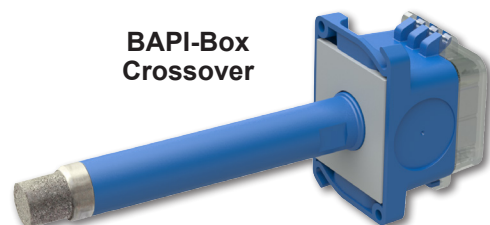


## Features & Options

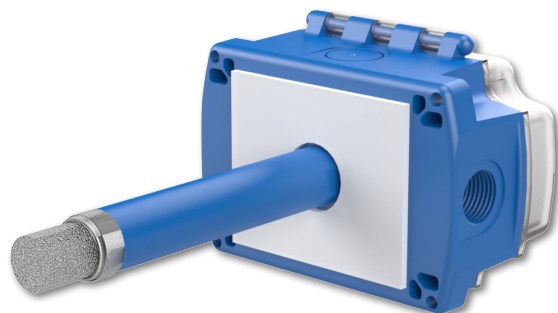
- 10 Points of Calibration from 10 to 90% RH
- Humidity Only or Temp./Humidity Combination
- Replaceable Stainless Steel Filter
- Green Power Indication LED on BAPI-Box Crossover Units
- $\pm 2\%$  and  $\pm 3\%$  RH Accuracies

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**



## 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:

Temperature: -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**  
**Duct Units with a Temperature Sensor**

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

**#1: Temp Sensor (Required)**  
 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)**  
 D-BBX....BAPI-Box Crossover (IP10, NEMA 1)  
 D-BB.....BAPI-Box (IP66, NEMA 4)

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

**Example Number:**

BA/(10K-2) - (H200) - (D-BBX)

BA/10K-2-H200-D-BBX (no parenthesis)

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

**Option Selection Guide**  
**Duct 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)**  
 D-BB .... BAPI-Box (IP66, NEMA 4)

*\*Voltage outputs are field selectable*

**Example Number:**

BA/(T1K)([32 TO 212F]) - (H200) - (D-BB)

BA/T1K[32 TO 212F]-H200-D-BB (no parenthesis)

**Description:** Temperature Transmitter with 4 to 20mA Output and 32 to 212°F Range, ±2%RH with 4 to 20mA Output, BAPI-Box Enclosure

**Your Number:** BA/

