Duct Units

Humidity or Combination Temp/Humidity Sensors

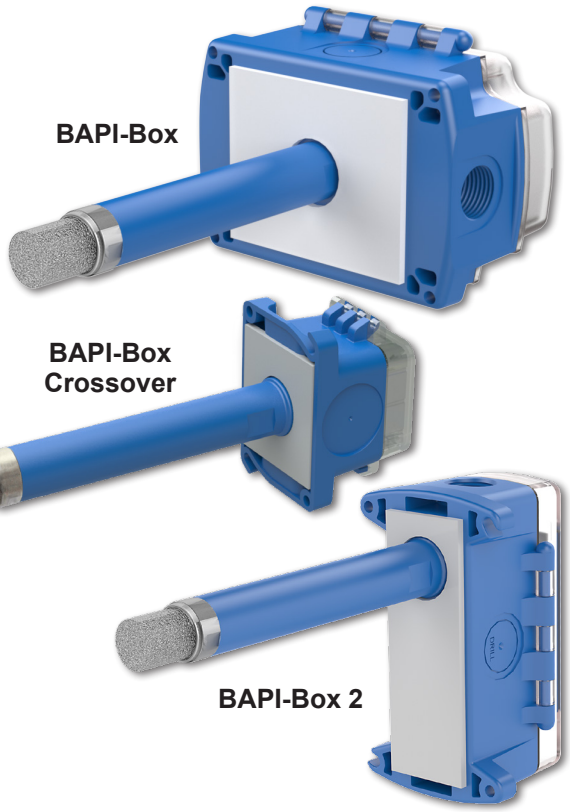
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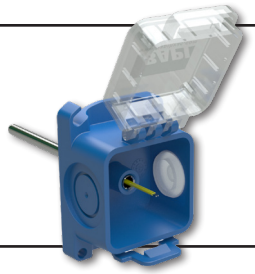
Features & Options

- 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
- ±2% and ±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 three of the most watertight enclosures available today. The BAPI-Box, BAPI-Box 2 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.





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, 0.53 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)
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:

BAPI-Box Crossover: IP10, NEMA 1 (IP44 with knockout plug)
BAPI-Box and BAPI-Box 2: IP66, NEMA 4X

BAPI-Box and BAPI-Box 2 Material:

UV-resistant Polycarbonate, UL94 V-0

BAPI-Box Crossover Material:

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

Environmental Operation Range:

Temperature: -40 to 158°F (-40 to 70°C)
Humidity: 0 to 100% RH
Fully Temperature Compensated

Agency: CE EN 61326-1:2013 EMC

Building Automation Products, Inc. • 750 North Royal Avenue, Gays Mills, WI 54631 USA
Tel: +1-608-735-4800 • Fax: +1-608-735-4804 • Email: sales@bapihvac.com • Web: www.bapihvac.com

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 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)

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*
TXS20..... 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: 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 Outpu

#4: BAPI-Box Enclosure (Required)

D-BB .... BAPI-Box (IP66, NEMA 4)

*Output not 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/

Building Automation Products, Inc. • 750 North Royal Avenue, Gays Mills, WI 54631 USA
Tel: +1-608-735-4800 • Fax: +1-608-735-4804 • Email: sales@bapihvac.com • Web: www.bapihvac.com