



## Features & Options

- Averaging Lengths: 8', 12' and 24'
- Five Enclosure Styles

BAPI Duct Averaging Units feature closed cell foam to seal the probe insertion hole and absorb vibration. Mounting tabs allow for easy installation to the duct. All units have etched Teflon leadwires and encapsulated sensors to create a watertight package that can perform under real world conditions.

Averaging probes should be used wherever there is a chance for stratified layers of hot and cold air. Averaging probes are made of bendable aluminum tubing and measure temperature along their entire length. Nylon tie straps are provided for mounting.

Duct Averaging Units come standard with a 2"x2" steel J-Box but are also available with no box, the BAPI-Box, the BAPI-Box 2 or the BAPI-Box Crossover enclosures.

### Flexible Probe Bracket

The Flexible Probe Bracket (FPB) simplifies the mounting of averaging sensors. The bracket is used to



reverse the direction of the probe with a smooth arc to eliminate the risk of kinking.

(See the Accessories Section for more info.)



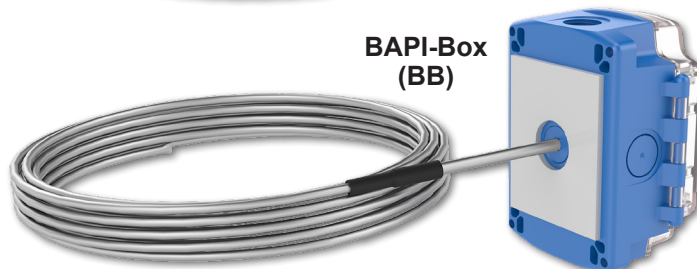
No Box  
(NB)



J-Box  
(Standard)



BAPI-Box Crossover  
(BBX)



BAPI-Box  
(BB)



BAPI-Box 2  
(BB2)

## Specifications

### Environmental Operation Range:

Temperature:

BBX: -40 to 185°F (-40 to 85°C)

Other Enclosures: -40 to 212°F (-40 to 100°C)

Humidity: 0 to 95%, non-condensing

### Sensing Element:

Thermistor or RTD (See Sensors Section for Specs.)

### Probe Material:

Bendable Aluminum, 3/16" diameter

### Enclosure Material:

J-Box: Galvanized Steel

BBX: Polycarbonate (UL94 V-0) & Nylon (UL94 HB)

BB & BB2: UV-Resistant Polycarb. (UL94 V-0)

### Enclosure Rating:

J-Box: IP20, NEMA 1

BBX: IP10, NEMA 1

IP44 with knockout plug in open port

BB & BB2: IP66, NEMA 4

### Enclosure Dimensions: H x W x D

BBX: 3.1 x 2.2 x 1.9" (79 x 56 x 49mm)

J-Box: 2.1 x 2.1 x 1.94" (54.6 x 54.6 x 49mm)

BB: 5 x 4.1 x 2.5" (127 x 104 x 63.5mm)

BB2: 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)

(For enclosure dimension drawings, see the end of the section.)





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 Averaging Temperature Sensors**

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

**#1: Temp Sensor (Required)**

1.8K .....	1.8K Thermistor	<b>Call for price.</b>
3K .....	3K Thermistor	
10K-2 .....	10K-2 Thermistor	
10K-3 .....	10K-3 Thermistor	
10K-3[11K]...	10K-3[11K] Thermistor	
20K .....	20K Thermistor	
1K .....	1K Plat. RTD (385 curve)	

**#2: Probe Length (Required)**

A-8' .....	8' (2.4m) length
A-12' .....	12' (3.7m) length
A-24' .....	24' (7.3m) length

**#3: Enclosure (Optional)**  
(J-Box comes standard if nothing selected)

BBX .....	BAPI-Box Crossover (IP10, NEMA 1)
BB .....	BAPI-Box (IP66, NEMA 4)
BB2 .....	BAPI-Box 2 (IP66, NEMA 4)
NB .....	No Box, 6" Etched Teflon Leads

**#4: Test & Balance or Terminal Strip (Optional)**  
(requires a BBX, BB or BB2 enclosure above)

TB .....	Test & Balance Switch
TS .....	Terminal Strip Connection

**Example Number:**

BA/(10K-2) - (A-8') - (NB) - ( )  
BA/10K-2-A-8'-NB (no parenthesis)

**Description:** 10K-2 Thermistor, 8' Probe, No Box Enclosure with 6" Etched Teflon Leads

**Option Selection Guide**  
**Duct Averaging Temperature Transmitters**

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

**#1: Output (Required)**

T1K .....	4 to 20mA Output	<b>Call for price.</b>
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)**

A-8' .....	8' (2.4m) length
A-12' .....	12' (3.7m) length
A-24' .....	24' (7.3m) length

**#4: Enclosure (Required)**

BBX .....	BAPI-Box Crossover (IP10, NEMA 1)
BB .....	BAPI-Box (IP66, NEMA 4)
BB2 .....	BAPI-Box 2 (IP66, NEMA 4)

**#5: Terminal Strip (Optional)**

TS .....	Terminal Strip Connection
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\*Voltage outputs are field selectable

**Example Number:**

BA/(T1K)[(32 TO 212F)] - (A-8') - (BBX) - ( )  
BA/T1K[32 TO 212F]-A-8'-BBX (no parenthesis)

**Description:** 4 to 20mA Transmitter, 32 to 212°F Range, 8' Probe, BAPI-Box Crossover Enclosure

**Your Number:** BA/

Gray shaded items follow the Buy and Resale Multiplier.

