Duct Units

Humidity & Combination Temp/Humidity Sensors







Features & Options

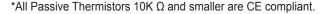
- 10 Points of Calibration from 10 to 90% RH
- Humidity Only or Temp./Humidity Combination
- Three Watertight Enclosure Styles
- Replaceable Stainless Steel Filter
- 2% and 3% RH Accuracies
- Wide Selection of Temperature Sensing Elements

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 Duct Units are also extremely dependable, featuring three of the most watertight enclosures available today: the polycarbonate BAPI-Box and BAPI-Box 2 and the cast aluminum WP enclosure.

All Duct Units feature closed cell foam to seal the insertion hole and to absorb vibration. Mounting tabs allow for easy installation to the wall of the duct. The units are built to withstand high humidity and condensation and perform in the real world.

Replacement Filter - The 100 micron sintered stainless steel filter protects the sensor from contamination while allowing airflow. See "Accessories" for more info.











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)

Encl. Dimensions: H x W x D

BAPI-Box (BB) 5 x 4.1 x 2.5" (127 x 104 x 63.5mm) BAPI-Box 2 (BB2) 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm) Weatherproof (WP) 4.5 x 2.75 x 2.2" (114 x 70 x 55mm)

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

Sensor:

Humidity: Capacitive 2% or 3% RH

(10 to 90% RH @ 23°C) WP Model: Cast Aluminum

Temp: Thermistor, Semiconductor

BB & BB2: UV-resistant Polycarbonate, UL 94, V-0

RTD or Temp Transmitter

Environmental Operation Range:

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

Fully Temperature Compensated

Note: See installation sheets for full specifications.

For detailed specifications on the Sensors & Transmitters, see the "Sensors" section.



Enclosure Rating:

WP Model: NEMA 3R

BB & BB2: IP66, NEMA 4

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Enclosure Material:



Humidity & Combination Temp/Humidity Sensors

Ordering Grids without List Prices are available on our website at www.bapihvac.com

ring Infor	mation Duct U	nits - Humidity o	or Combination	remp. &	Humidity			List	You
					6: 1 104:	P. 4 0		Price	Ord
Optiona	l Sensor Type Us	e the designator	number (snov	vn to tne i	ett in bold) to li	ndicate the sensor			
		THERMISTORS	3		RTDs			Thermistors	
##-	1.8K	1.8K Ω @ 25 °C	5	100	100 Ω Platinum	n @ 0 °C, .385 Ω/°C t	emp. coeff.	\$18 Each	\$
	3K	3K Ω @ 25 °C		100[3W]	3 Wire 100 Ω F	Plat. @ 0 °C, .385 Ω/°	C temp. coeff.		
	3.25K	3.25 K Ω @ 25°				@ 0 °C, 3.75 Ω/°C te		RTD's	
	3.3K	3.3K Ω @ 25 °C		1K[NI]		21°C, 5 Ω/°C temp. 0		\$25 Each	
	10K-2	10K Ω @ 25 °C		1K		@ 0 °C, 3.85 Ω/°C te		or	\$
	10K-3	10K Ω @ 25 °C		2K	2K Ω Silicon @	20 °C, 8 Ω/°C temp.	coeff.	\$35 for 1K[NI]	
	10K-3[11K]	5,238 Ω @ 25 $^{\circ}$							
	20K	20K Ω @ 25 °C			SEMICONDUC			Semi-	
	50K	50K Ω @ 25 °C		334	LM334 Semico			<u>conductors</u>	
	100K	100K Ω @ 25 °	C			nductor, 273 μA @ 0		\$25 Each	\$
				592-10K		nductor with 10 kΩ s	hunt resistor,		
					2.73 V @ 0 °C				
		TEMPERATURE TRANSMITTERS Must include a "range" figure						Temperature	
	T1K[range]	TK Platinum RTD, 1,000 Ω @ 0 °C with 4 to 20 mA Output* 1K Platinum RTD, 1,000 Ω @ 0 °C with MATCHED 4 to 20 mA Output*						Transmitters	
	T1KM[range]								\$
	T10K[range]							\$125 for T1K	·
	T10K[range]	10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output* 10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 VDC Output*						or T10K	
	T10K10[range]	10K Thermistor, 10,000 Ω @ 25 °C with 0 to 5 VDC Output*							
	Troitro[range]								
		STANDARD TEMPERATURE TRANSMITTER RANGES						6000 for	
		40 TO 90F	-30 TO 130F		4 TO 32C	-34 TO 54C		\$280 for	\$
		0 TO 100F	32 TO 212F		-18 TO 38C	0 TO 100C		T1KM	
		20 TO 120F	30 TO 234F		-7 TO 48C	-1 TO 112C			
		32 TO 134F			0 TO 57C				
	Humidity Transmitter (Required)							1	
	H200	±2% Humidity Transmitter with Interchangeable Output of 0 to 5 V or 4 to 20 mA						\$240	\$
	H210	±2% Humidity T	ransmitter with	0 to 10 V (Dutput			\$240	\$
	H212	±2% Humidity T	ransmitter with	2 to 10 V (Dutput			\$240	\$
	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						A	\$240	\$
								\$240	\$
	H312	H312 ±3% Humidity Transmitter with 2 to 10 V Output Enclosure (Required)						\$240	\$ \$ \$ \$
		-D-BB	BAPI-Box Enc	losure - IP	66 rated, UV-res	sistant polycarbonate		\$12	\$
		-D-BB2				esistant polycarbonat	e*	\$12	\$
		-D-WP	Weatherproof	Enclosure	- NEMA 3R rate	d metal enclosure*		\$12	\$ \$ \$
1PLE	•								
10K-2-		D-BB						Total =	\$
ple Part N	Number: BA/10K-2-H2	200-D-BB						Total –	Ψ
Part Num	hor:								

^{*}Note: Units with a temperature transmitter and a humidity transmitter require a doublegang D-WP enclosure or D-BB enclosure. Dual transmitter units are not available with the D-BB2 enclosure.

Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering.

Doublegang Weatherproof Enclosure

Units with a Temperature Transmitter and a Humidity Transmitter require a doublegang Weatherproof (D-WP) enclosure or BAPI-Box (D-BB) enclosure and are not available in the BAPI-Box 2 (D-BB2) enclosure.



Doublegang Weatherproof Enclosure



