



Features & Options

- Accurate Dew Point and Dry Bulb Temperature in One Unit
- ±1.8°F (1°C) Dew Point Accuracy for the Normal Range
- Multiple Analog Outputs, 0 to 5VDC or 0 to 10VDC
- No Installation Calibration or Recalibration Required



Dew Point Sensors with Setpoint, Display and Override

The green revolution is increasing the use of chilled beams and chilled ceilings in commercial buildings. Chilled water is pumped through hollow beams or special hollow ceiling tiles. Radiation cools the space eliminating air handlers, VAV boxes, fan-coil units and the energy to run them.

The temperature of the chilled water has to be regulated above the space's air dew point temperature. If the beam or ceiling temperature is below the space's dew point, they will "sweat", causing mold and dripping water.

BAPI's Dew Point Sensor is an easy and economical way to measure the dew point temperature. The unit is available with an optional display, temperature setpoint slider and an occupant override pushbutton. The large format display allows you to easily read Dew Point Temperature and Dry Bulb Temperature. The display alternates between these values and is field adjustable between °F or °C. One or both of the displayed values may be easily turned on or off by an HVAC technician.

For detailed specs on the individual Temperature Sensors, turn to the "Sensors" section.

Specifications

Power: 15 to 35 VDC @ 4 mA max

Sensing Element:

Humidity – Capacitive Polymer,
±2% RH Accuracy, 10% to 90% @ 25°C

Temperature Sensor

Thermistor, RTD or Semiconductor

Mounting: 2"x4" J-Box or drywall mount
(screws provided)

Dew Point Temperature Range:

-4 to 122°F (-20 to 50°C)

Operating Environment:

32 to 122°F (0 to 50°C)

0 to 95%RH non-condensing

Response Time: Less Than 60 Seconds

Display: 3.5 digit numeric (Dew Pt & Dry Bulb Temp)

Measurement Offsets (field adjustable)

±5° (F or C) in 0.1° or 0.5° increments – DB

±5 RH in 0.1% or 0.5% increments – RH

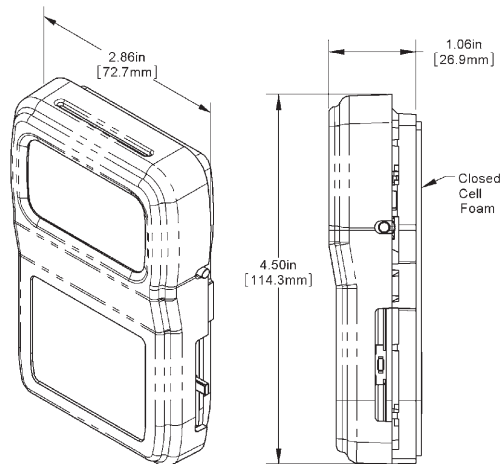
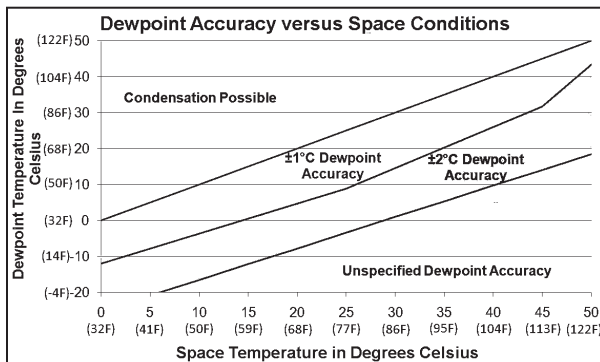
Analog Output (0 to 5 or 0 to 10VDC, 1KΩ impedance)

Dew Point Temperature: -4 to 122°F (-20 to 50°C)

Calibration: Internal & Continuous

Material: ABS Plastic, Material Rated UL94V-0

Certifications: CE*, RoHS



* Units with passive Thermistors 20KΩ and smaller, or no temperature sensor, are CE compliant.

Note: BAPI recommends that you do not run wiring for the room units in the same conduit as line voltage wiring or with wiring used to supply highly inductive loads such as motors, generators and coils.





Dew Point Sensor

B15

Rev. 07/16/15

Humidity or Combination Temp/Humidity Sensors

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

Ordering Information		Dew Point Sensor		List Price	Your Order																																																		
BA/	Dew Point Transmitter																																																						
	DP05 Dew Point Transmitter as -4 to 122°F (-20 to 50°C) Dew Point, 0 to 5 VDC output			\$260.00	\$ _____																																																		
	DP10 Dew Point Transmitter as -4 to 122°F (-20 to 50°C) Dew Point, 0 to 10 VDC output			\$260.00	\$ _____																																																		
	Optional Temperature Sensor Use the designator number (shown to the left in bold) to indicate the sensor																																																						
	<table border="0"> <tr> <td>---#</td> <td>THERMISTORS</td> <td>RTDs</td> <td></td> <td></td> </tr> <tr> <td></td> <td>1.8K 1.8K Ω @ 25 °C</td> <td>1K (375) 1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.</td> <td></td> <td>Thermistors</td> </tr> <tr> <td></td> <td>3K 3K Ω @ 25 °C</td> <td>1K 1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.</td> <td></td> <td>\$18 Each</td> </tr> <tr> <td></td> <td>3.3K 3.3K Ω @ 25 °C</td> <td>2K 2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.</td> <td></td> <td></td> </tr> <tr> <td></td> <td>10K-2 10K Ω @ 25 °C</td> <td></td> <td></td> <td>RTD's</td> </tr> <tr> <td></td> <td>10K-3 10KΩ @ 25 °C</td> <td></td> <td></td> <td>\$25 Each</td> </tr> <tr> <td></td> <td>10K-3(11K) 5,238 Ω @ 25 °C</td> <td>SEMICONDUCTORS</td> <td></td> <td></td> </tr> <tr> <td></td> <td>20K 20K Ω @ 25 °C</td> <td>334 LM334 Semiconductor</td> <td></td> <td>Semi-conductors</td> </tr> <tr> <td></td> <td>50K 50K Ω @ 25 °C</td> <td>592 AD592 Semiconductor, 273 μA @ 0 °C</td> <td></td> <td>\$25 Each</td> </tr> <tr> <td></td> <td>100K 100K Ω @ 25 °C</td> <td></td> <td></td> <td></td> </tr> </table>				---#	THERMISTORS	RTDs				1.8K 1.8K Ω @ 25 °C	1K (375) 1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.		Thermistors		3K 3K Ω @ 25 °C	1K 1K Ω Platinum @ 0 °C, 3.85 Ω/°C temp. coeff.		\$18 Each		3.3K 3.3K Ω @ 25 °C	2K 2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.				10K-2 10K Ω @ 25 °C			RTD's		10K-3 10KΩ @ 25 °C			\$25 Each		10K-3(11K) 5,238 Ω @ 25 °C	SEMICONDUCTORS				20K 20K Ω @ 25 °C	334 LM334 Semiconductor		Semi-conductors		50K 50K Ω @ 25 °C	592 AD592 Semiconductor, 273 μA @ 0 °C		\$25 Each		100K 100K Ω @ 25 °C				
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	Enclosure Style																																																						
	-B4 BAPI-Stat 4 Style Enclosure																																																						
	LCD Display																																																						
	D LCD Display			\$35.00	\$ _____																																																		
	X No LCD Display																																																						
	°F or °C Display Mode (Select one if ordering a unit with LCD Display)																																																						
	F Temperatures Displayed in °F																																																						
	C Temperatures Displayed in °C																																																						
	Setpoint Display Options (Skip if not required)																																																						
	Desired Range	Designator	Desired Range	Designator																																																			
	-2 to +2	P	60 to 80 °F or 15 to 27 °C	E																																																			
	-3 to +3	A	65 to 80 °F or 18 to 27 °C	F																																																			
	-5 to +5	B	70 to 74 °F or 21 to 23 °C	L																																																			
	50 to 90 °F or 10 to 32 °C	C	45 to 96 °F or 7 to 36 °C	G																																																			
	55 to 85 °F or 13 to 30 °C	D																																																					
	Setpoint Output Value Range (Skip if not required)																																																						
	Desired Range	Designator	Desired Range	Designator																																																			
	674 to 274 Ω	23	15 k to 5 kΩ	61																																																			
	800 to 1200 Ω	25	0 to 20 kΩ	80																																																			
	909 to 1309 Ω	26	4.75 k to 24.75 kΩ	81																																																			
	1800 to 2200 Ω	27	6.19 k to 26.19 kΩ	82																																																			
	0 to 1000 Ω	40	7.87 k to 27.87 kΩ	83																																																			
	500 to 1500 Ω	41	10 k to 30 kΩ	84																																																			
	2 k to 3 kΩ	42	0 to 100 kΩ	90																																																			
	0 to 10 kΩ	60	0 to 5 V	00																																																			
			0 to 10 V	10																																																			
	SETPOINT LEGEND (insert Designator #)																																																						
	Legend Range	Designator	Legend Range	Designator																																																			
	5 to 30 C	L1	65 to 80 F	L4																																																			
	55 to 85 F	L2	COOL/WARM	L6																																																			
	60 to 85 F	L3	WARM/COOL	L7																																																			
	Override Configuration (Must select one)																																																						
	-J Override as a Separate Output. (Dry contact only, not intended to switch a load.)			\$5.00	\$ _____																																																		
	-N Override in Parallel (//) with Sensor			\$5.00	\$ _____																																																		
	-P Override in Parallel (//) with Setpoint: NOT available on voltage setpoint models			\$5.00	\$ _____																																																		
	-Z No Override. (Needed if no override is required)			\$0.00	\$ _____																																																		
	Optional Communication Jack Mounted in unit's base																																																						
	-C11L RJ11 (4 pin) Style Jack with Leads			\$20.00	\$ _____																																																		
	-C11LT RJ11 (4 pin) Style Jack with Leads and Terminal Block			\$20.00	\$ _____																																																		
	-C35L 3.5 mm Phono Jack w/ Leads Attached			\$10.00	\$ _____																																																		
	-C35LT 3.5 mm Phono Style Jack with Leads and Terminal Block			\$10.00	\$ _____																																																		
	-C22L RJ22 (4 pin) Style Jack with Leads Attached			\$25.00	\$ _____																																																		
	-C22LT RJ22 (4 pin) Style Jack with Leads and Terminal Block			\$25.00	\$ _____																																																		
	Optional Test and Balance Switch																																																						
	-TB Three Position Switch			\$7.50	\$ _____																																																		
	Logo Plate Color (BAPI-Stat 2 is Warm White only)																																																						
	-WMW Warm White Logo Plate Color (standard)																																																						
	-GRY Gray Logo Plate Color (BAPI-Stat 4 only)																																																						
EXAMPLE																																																							
BA/	DP05	10K-2	-B D F A 41L6																																																				
Example Part Number: BA/DP05-10K2-B4DF-A61L6-J-C11L-WMW																																																							
Your Part Number:																																																							
				Total =	\$ _____																																																		

Call BAPI if you have questions about the above ordering grid or the configuration of the product you are ordering. This unit is Common Ground Configuration only.

