

Wall Plate Sensor with Room Unit for Washdown and Wipedown Locations

Features & Options

- Stainless Steel, Watertight Wall Plate Unit
- $\pm 2\%$ and $\pm 3\%$ RH Accuracies
- $^{\circ}\text{C}$ or $^{\circ}\text{F}$ Operation (user selectable)
- Full Range Temperature Compensation of RH Signal
- Wide Selection of Temperature Sensing Elements
- 0 to 5 VDC or 4 to 20mA Humidity Output
- Optional Override and Setpoint Adjustment
- Two Year Warranty



**Vivarium Wall Plate Sensor
and Room Unit Combo**

The Vivarium Combination Sensor & Display provides measurement, display and adjustment of both humidity and temperature in a single package. The watertight Wall Plate Unit is designed for washdown or wipedown areas and features a series 304 stainless steel plate, a stainless steel sintered filter with washdown/wipedown cover, a small probe containing the temperature and humidity elements and a "ruggedized" encapsulated transmitter. A $\frac{1}{4}$ " closed cell foam pad insulates the sensors from the wall temperature.

The Room Unit is designed to be located outside of the washdown/wipedown area that is being monitored. The display toggles between temperature and humidity at a user adjustable rate, and an optional Setpoint allows adjustment of both temperature and humidity. An override pushbutton is also available. An optional Light Sensor can be added to all available models for a nominal charge. This sensor provides a resistance value indicating the presence or absence of ambient light. Call BAPI for details on the light sensor.

*For detailed specs on
the individual Sensors &
Transmitters, turn to the
Sensors section.*

Replacement Filter and Cap

The 100 micron sintered stainless steel filter protects the sensor from contamination while allowing airflow. The cap protects the filter during washdown cleaning.

BA/HDOFS: Replacement Filter

BA/VFC: Filter Cap



Specifications

Power:

12 to 35 VDC (15 to 24 VDC recommended)
15 to 24 VAC (Requires a separate pair of shielded wires)

Power Consumption: 50 mA maximum DC
1.2 VA maximum AC

Sensing Elements:

Temperature - Thermistor, RTD or Semiconductor
Humidity - Impedance Type, $\pm 2\%$ or $\pm 3\%$ RH

Environmental Operation Range:

Temp: 32 to 122 $^{\circ}\text{F}$ (0 to 50 $^{\circ}\text{C}$)
Humidity: 0 to 95% RH, non-condensing

Wiring: 2 to 4 pair of 16 to 22 AWG*

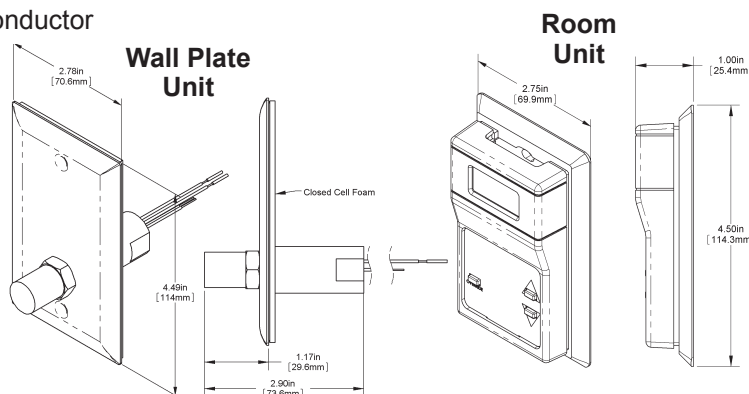
Plate sensor to display: <18"

* 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.

Mounting: Standard 2" by 4" J-box
- mounting screws provided

Material: Room Unit: ABS Plastic
Wall Plate: Stainless Steel

Enclosure Material Rating: UL 94, V-0





Vivarium Combo Sensor & Display **B23**

Humidity & Combination Temp/Humidity Sensors

Rev. 12/08/10

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

Ordering Information Vivarium Combo Sensor & Display											List Price	Your Order			
Display Mode															
F	Temperatures Displayed in °F														
C	Temperatures Displayed in °C														
Accuracy															
2	Accuracy in % for the Relative Humidity Output (i.e. ±2% RH)										\$200	\$ _____			
3	Accuracy in % for the Relative Humidity Output (i.e. ±3% RH)										\$170	\$ _____			
Channel # 1* - T, H, R are placeholders for the range options. (See inset)															
-0 T	Temperature Output, 4-20 mA										\$50 for Channel #1	\$ _____			
-1 T	Temperature Output, 0-5 V														
-2 T	Setpoint Output, Temperature 4-20 mA														
-3 T	Setpoint Output, Temperature 0-5 V														
-4 H	Setpoint Output, %RH 4-20 mA														
-5 H	Setpoint Output, %RH 0-5V														
Channel # 2* - T, H, R are placeholders for the range options. (See inset)															
-10 H	%RH Output, 4-20 mA										\$50 for Channel #2	\$ _____			
-11 H	%RH Output, 0-5 V														
-12 T	Setpoint Output, Temperature 4-20 mA														
-13 T	Setpoint Output, Temperature 0-5 V														
-14 H	Setpoint Output, %RH 4-20 mA														
-15 H	Setpoint Output, %RH 0-5 V														
Channel # 3* - T, H, R are placeholders for the range options. (See inset)															
-20 T R	Setpoint Output, Temperature Resistive w/ Override										\$50 for Channel #3	\$ _____			
-21 T	Setpoint Output, Temperature 0-5 V w/Override														
-22 H R	Setpoint Output, %RH Resistive w/ Override														
-24 T R	Setpoint Output, Temperature Resistive w/o Override														
-25 T	Setpoint Output, Temperature 0-5 V w/o Override														
-26 H R	Setpoint Output, %RH Resistive w/o Override														
-27 H	Setpoint Output, %RH 0-5 V w/o Override														
-28	Override Only [High Ω -> Low Ω -> High Ω]														
-29	Override Only [5 V -> 0 V -> 5 V]														
Sensor Type (if resistive sensor required)															
-0	100 Platinum RTD, 100 Ω @ 0 °C, 0.385 Ω/°C temp. coeff.										RTD's \$25 Each or \$35 for 1N1	\$ _____			
-1375	1K Platinum RTD, 1,000 Ω @ 0 °C, 3.75 Ω/°C temp. coeff.														
-1N1	1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.														
-1	1K Platinum RTD, 1,000 Ω @ 0 °C, 3.85 Ω/°C temp. coeff.										Thermistors \$18 Each	\$ _____			
-2	2K Silicon RTD, 2,000 Ω @ 20 °C, 8 Ω/°C temp. coeff.														
-18	1.8K Thermistor, 1,800 Ω @ 25 °C														
-22	2.2K Thermistor, 2,200 Ω @ 25 °C														
-3	3K Thermistor, 3,000 Ω @ 25 °C														
-33	3.3K Thermistor, 3,300 Ω @ 25 °C														
-102	10K-2 Thermistor, 10,000 Ω @ 25 °C														
-103	10K-3 Thermistor, 10,000 Ω @ 25 °C														
-10311	10K-3(11K) Therm., 5,238 Ω @ 25 °C, 11kΩ shunt resistor														
-20	20K Thermistor, 20,000 Ω @ 25 °C														
-47	47K Thermistor, 47,000 Ω @ 25 °C										Semi-conductors \$25 Each	\$ _____			
-50	50K Thermistor, 50,000 Ω @ 25 °C														
-100	100K Thermistor, 100,000 Ω @ 25 °C														
-334	LM334 Semiconductor														
-592	AD592 Semiconductor, 273 µA @ 0 °C														
Optional Communication Jack															
-C11L	RJ11 (4 pin) Style Jack with Leads										\$20	\$ _____			
-C11LT	RJ11 (4 pin) Style Jack with Leads and Terminal Block										\$20	\$ _____			
-C35L	3.5 mm Phono Jack w/ Leads Attached										\$10	\$ _____			
-C35LT	3.5 mm Phono Style Jack with Leads and Terminal Block										\$10	\$ _____			
-C22L	RJ22 (4 pin) Style Jack with Leads Attached										\$25	\$ _____			
-C22LT	RJ22 (4 pin) Style Jack with Leads and Terminal Block										\$25	\$ _____			
Optional Test & Balance Switch**															
-TB	3 Position Switch - "Low" & "High" values vary, "Normal" is live sensor value, call for details.*										\$7.50	\$ _____			
Wall Plate Unit															
-SPV	Stainless Steel Wall Plate										\$200	\$ _____			
Enclosure Color Warm White Standard															
-CPW	Copia White Enclosure														
EXAMPLE															
BA/XC	F	3	-4	M	-10	M	-20	C	P	-102	-C11L	-TB	-SPV		
Example Part Number: BA/XCF3-4M-10M-20CP-102-C11L-TB-SPV														Total =	\$ _____
Your Part Number:															

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

* Channel 1, 2 or 3 are required

** Test & Balance is only available with Direct Sensor Type Output