BAPI-Stat “Quantum Prime” Temp & Humidity Sensor

Temp or Temp/Humidity Sensors

Rev. 04/06/20

Features & Options

- New BAPI-Stat "Quantum Prime" Enclosure Style with Higher Contrast Display for Improved Clarity at Greater Distances
- Membrane Keypad for Wipedown Cleaning
- Temperature and Humidity Setpoint Adjustment

The BAPI-Stat “Quantum Prime” is designed for operating rooms, clean rooms and elder care facilities. It features a large display and membrane keypad for wipedown cleaning. It is available with temperature and humidity measurement, temperature and humidity setpoint and occupant override.

The unit includes a number of field adjustments including °F or °C display, temperature and humidity offset and setpoint lockout. The display can also be set to show a large temperature and small %RH reading or a large %RH and a small temperature reading when 4 buttons are present. This unit can be configured with up to four transmitted variables. Contact your BAPI representative for details.

BAPI-Stat “Quantum Prime” Temp & Humidity Sensor

5 YEAR WARRANTY

Ordering Information

The BAPI-Stat “Quantum Prime” Wipedown Sensor is a powerful unit with many options. Please call your BAPI representative for ordering. We will provide a quote and keep it on record for future orders.

Specifications

Power Supply:
10 to 40 VDC (15 to 24 VDC Recommended) for 4 to 20 mA or 0 to 5 VDC Outputs
15 to 40 VDC (15 to 24 VDC Recommended) for 0 to 10 VDC Outputs
12 to 28 VAC (Requires a separate pair of shielded wires) for 0 to 5 VDC Outputs

Power Consumption:
60 mA max DC: 4 to 20 mA Output (<30mA typical)
36 mA max DC: 0 to 5 or 0 to 10 VDC Outputs (6mA typical)
0.9 VA max AC: 0 to 5 or 0 to 10 VDC Outputs (0.2VA typical)

Outputs: 4 active outputs plus 1 passive temp sensor
Volts.....0 to 5 VDC or 0 to 10VDC, Impedance >10KΩ
Current.....4 to 20 mA, Impedance <500Ω @ 24 VDC
Resistance.....Setpoint, 5 VDC @ 5 mA max
Relay Contact....N.O., 500 mA @ 24 VDC max
Temp. Sensor ....Passive RTD or Thermistor

Inputs:
External Override..5 VDC or 24 VDC/VAC
External Sensor....10K-2 Themistor purchased separately.

Sensing Elements for Active Outputs and Display:
Temperature .....10K-2 Thermistor
Humidity.....Capacitive Polymer, ±2%RH

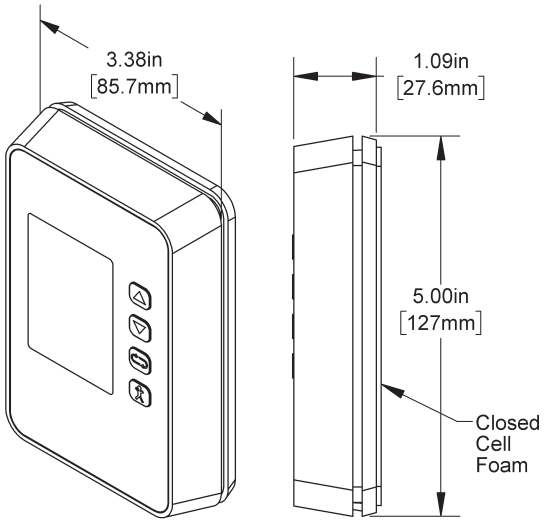
Mounting: 2”x4” J-box or drywall mount - screws provided

Environmental Ambient:
Temperature .....32 to 122ºF (0 to 50ºC)
Humidity.....0 to 95%, non-condensing
Storage.....32 to 185°F (0 to 85°C)

Wiring: 2 to 6 pair of 16 to 22 AWG

Enclosure Material: ABS Plastic, UL 94, V-0

Agency: RoHS



*AC power requires a separate pair of shielded wires.

**BAPI recommends that you do not run wiring for 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.

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BAPI-Stat "Quantum Prime" Temp or Temp/Humidity Ordering Grid

Temp or Temp/Humidity Sensors

Rev. 06/20/18

Ordering Information	BAPI-Stat "Quantum Prime" - Temperature, Humidity or Combination	List Price	Your Order
BA/HQP	BAPI-Stat "Quantum Prime" Room Sensor (Required Selection)	$200	$_____
	Temperature Display Mode (Required Selection)		
F	Temperatures Displayed in °F		
C	Temperatures Displayed in °C		
	Humidity Sensor Accuracy (Optional Selection - skip if ordering a temperature only unit)		
2	Accuracy in % for the Relative Humidity Output (i.e. ±2% RH)	$80	$_____
	Output #1* (OUT1) - *Use inset charts to select range values for T & H. (Required Selection)*		
-0 *T*	Temperature Output, 4 to 20 mA		
-1 *T*	Temperature Output, 0 to 5 V	$50 for Output #1	$_____
-2 *T*	Setpoint Output, Temperature 4 to 20 mA		
-3 *T*	Setpoint Output, Temperature 0 to 5 V		
-4 *H*	Setpoint Output, %RH 4 to 20 mA		
-5 *H*	Setpoint Output, %RH 0 to 5V		
-6 *T*	Temperature Output 0 to 10V		
-7 *T*	Setpoint Output, Temperature 0 to 10V		
-8 *H*	Setpoint Output, %RH 0 to 10V		
-X	No Output #1 (OUT1)		
	Output #2* (OUT2) - Use inset charts to select range values for *T & H. (Required Selection)*		
-10 *H*	%RH Output, 4 to 20 mA		
-11 *H*	%RH Output, 0 to 5 V	$50 for Output #2	$_____
-12 *T*	Setpoint Output, Temperature 4 to 20 mA		
-13 *T*	Setpoint Output, Temperature 0 to 5 V		
-14 *H*	Setpoint Output, %RH 4 to 20 mA		
-15 *H*	Setpoint Output, %RH 0 to 5 V		
-16 *H*	%RH Output, 0 to 10 V		
-17 *T*	Setpoint Output, Temperature 0 to 10 V		
-18 *H*	Setpoint Output, %RH 0 to 10 V		
-X	No Output #2 (OUT2)		
	Output #3 (OUT3) - *Use inset charts to select values for T, H, R & G.* (Optional Selection)		
-20 *T R G*	Setpoint Output, Temperature, Resistive w/ Override (DF is wired to OUT3 & OUT4)		
-21 *T R G*	Setpoint Output, Temperature, Voltage w/ Override (Common Ground Required)		
-22 *H R G*	Setpoint Output, %RH Resistive w/ Override (DF is wired to OUT3 & OUT4)	$50 for Output #3	$_____
-23 *H R G*	Setpoint Output, %RH Voltage w/ Override (Common Ground Required)		
-24 *T R G*	Setpoint Output, Temperature, Resistive w/o Override (DF is wired to OUT3 & OUT4)		
-25 *T R G*	Setpoint Output, Temperature, Voltage w/o Override (Common Ground Required)		
-26 *H R G*	Setpoint Output, %RH Resistive w/o Override (DF is wired to OUT3 & OUT4)		
-27 *H R G*	Setpoint Output, %RH Voltage w/o Override (Common Ground Required)		
-X	No Output #3 (OUT3) or Output #4 (OUT4)		
	Output #4 (OUT4) - *Use inset charts to select values for T, H, R & G.* (Optional, Only available with Output #3 selected)		
-40 *T R G*	Setpoint Output, Temperature, Resistive w/ Override (DF is wired to OUT3 & OUT4)		
-41 *T R G*	Setpoint Output, Temperature, Voltage w/ Override (Common Ground Required)		
-42 *H R G*	Setpoint Output, %RH Resistive w/ Override (DF is wired to OUT3 & OUT4)	$50 for Output #4	$_____
-43 *H R G*	Setpoint Output, %RH Voltage w/ Override (Common Ground Required)		
-44 *T R G*	Setpoint Output, Temperature, Resistive w/o Override (DF is wired to OUT3 & OUT4)		
-45 *T R G*	Setpoint Output, Temperature, Voltage w/o Override (Common Ground Required)		
-46 *H R G*	Setpoint Output, %RH Resistive w/o Override (DF is wired to OUT3 & OUT4)		
-47 *H R G*	Setpoint Output, %RH Voltage w/o Override (Common Ground Required)		
	Override - Dry Contact Use inset chart to select value for G (Optional Selection)		
-60 **G**	Dry Contact Override in parallel w/ OUT4 (Only available as Common Ground) (Not available if OUT4 is configured as a voltage output)		
-61 **G**	Dry Contact Override in parallel with "TEMP+" and "TEMP-" Terminals		
	Resistive Temp Sensor (Required Selection) (Resistive output across the "TEMP+/TEMP-" Terminals)		
-A	1K Platinum RTD, 1,000 Ω @ 0 °C, 3.85 Ω/°C temp. coeff.	$25	$_____
-B	10K-2 Thermistor, 10,000 Ω @ 25 °C	$18	$_____
-C	10K-3 Thermistor, 10,000 Ω @ 25 °C	$18	$_____
-D	10K-3(11K) Therm., 5,238 Ω @ 25 °C, 11kΩ shunt resistor	$18	$_____
-E	20K Thermistor, 20,000 Ω @ 25 °C	$18	$_____
-F	1.8K Thermistor, 1,800 Ω @ 25 °C	$18	$_____
-G	1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.	$35	$_____
-H	3K Thermistor, 3,000 Ω @ 25 °C	$18	$_____
-X	No Resistive Temp Sensor		
-ES	External Sensor connection. 10K-2 Thermistor purchased separately***		
	Additional Options (List in alphabetical order if multiple selected)		
-A	Differential Ground for Resistive Temperature Sensor		
-B	Comm Jack C35: 3.5 mm Phono Jack w/ Leads Attached	$10	$_____
-C	Comm Jack C11: RJ11 (4 pin) Style Jack with Leads	$20	$_____
-D	Comm Jack C22: RJ22 (4 pin) Style Jack with Leads Attached	$25	$_____
-F	Test & Balance Switch, 3 Position**	$7.50	$_____

R = Output Range Designator****

Designator	Output Range	Span
00	0 to 5 V	5 Volts
01	1 to 5 V	4 Volts
02	3.7 to 0.85 V	2.85 Volts
03	5 to 0 V	5 Volts
04	4.2 to 1.2 V	3 Volts
10	0 to 10 V	10 Volts
20	889 to 111 Ω	778Ω
21	792 to 208 Ω	584Ω
22	695 to 305 Ω	390Ω
23	674 to 274 Ω	400Ω
24	597 to 305 Ω	292Ω
25	800 to 1200	400Ω
26	909 to 1309	400Ω
27	1800 to 2200	400Ω
28	866 to1286	400Ω
40	0 to 1 kΩ	1 kΩ
41	500 to 1500 Ω	1 kΩ
42	2 to 3 kΩ	1 kΩ
43	249 to 1249 Ω	1 kΩ
44	10 to 11 kΩ	1 kΩ
45	12.5K-11.5K Ω	1 kΩ
46	1K to 0 Ω	1 kΩ
47	182 to 1182 Ω	1 kΩ
50	0 to 5 kΩ	5 kΩ
51	7.87k to 2.87kΩ	5 kΩ
60	0 to 10 kΩ	10 kΩ
61	15 to 5 kΩ	10 kΩ
62	9577 to 1422 Ω	
63	1 to 11 kΩ	10 kΩ
64	200 to 10200	10 kΩ
80	0 to 20 kΩ	20 kΩ
81	4.75 to 24.75 kΩ	20 kΩ
82	6.19 to 26.19 kΩ	20 kΩ
83	7.87 to 27.87 kΩ	20 kΩ
84	10 to 30 kΩ	20 kΩ

***T* = Temperature, Output & Display Range**

	°F	°C
A	-3 to +3	-3 to +3
B	-5 to +5	-5 to +5
C	50 to 90 °F	10 to 32 °C
D	55 to 85 °F	13 to 30 °C
E	60 to 80 °F	15 to 27 °C
F	65 to 80 °F	18 to 27 °C
G	45 to 96 °F	7 to 35 °C
J	68 to 78 °F	20 to 26 °C
K	65 to 95 °F	18 to 35 °C
L	70 to 74 °F	21 to 23 °C
P	-2 to +2	-2 to +2
X	40 to 80 °F	4 to 27 °C

***H* = Relative Humidity Range**

Designator	%RH
M	0 to 100
N	35 to 70

G = Connection Configuration

Designator	Type
CG	Common Grnd
DF	Differential Grnd

EXAMPLE

BA/HQP	F	2	0	C	-10	M	-24	C	80	CG	-61	CG	-B		

Example Part Number: BA/HQPF2-0C-10M-24C80CG-61CG-B

Total = $_____

Your Part Number:

All ranges and options may not be shown here, call BAPI for additional options or with questions about this ordering grid

* Output 1 or 2 are Common Ground

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

***Must use a 10K-2 Thermistor for the External Sensor option. Thermistor is purchased separately. (25' max distance) This option is only available on units without humidity.

****Resistance Output Range spans of less than 10K are only available on OUT4. Do not configure on OUT3.

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