



Features & Options

- Optional temperature setpoint and occupant override
- User adjustable settings
- Onboard memory
- Transmits to a digital Gateway or a wireless-to-analog Receiver

The BAPI-Stat "Quantum" Wireless Sensor measures the room temperature and humidity and transmits the data via Bluetooth Low Energy to a receiver or gateway. It is available with optional temperature setpoint and occupancy override.



Sensors with optional Setpoint & Override
(Right image shown with optional 60mm mounting base)

Specifications

Battery Power: Two included 3.6V 14505, 14500 or equivalent lithium batteries
(Note: Standard AA batteries are not compatible)

Wire Power: 9 to 30 VDC or 24 VAC, halfwave rectified

Sensor Accuracy:

Temp: $\pm 1.7^{\circ}\text{F}$ (0.95°C) from 32 to 158°F (0 to 70°C)

Humidity: $\pm 2\% \text{RH}$ @ 77°F (25°C), 20 to 80%RH

Temperature Range: -4 to 221°F (-20 to 105°C)

Transmission Distance: Varies by application*

Environmental Operation Range:

Temp: -4 to 149°F (-20 to 65°C)

Humidity: 10 to 90%RH non-condensing

Enclosure Material & Rating: ABS Plastic, UL94 V-0

Frequency: 2.4 GHz (Bluetooth Low Energy)

Receiver Sensitivity: -97 dBm

User Adjustable Settings:

Delta T (Temp): 0.1°F/C to 5.0°F/C

Delta T (Humidity): 0.1%RH to 5.0%RH

Transmit Interval: 30 sec to 12 hour***

Sample Interval: 30 sec to 5 min***

Temp Offset: $\pm 0.1^{\circ}\text{F/C}$ to $\pm 5.0^{\circ}\text{F/C}$

Humidity Offset: $\pm 0.1\% \text{RH}$ to $\pm 3.0\% \text{RH}$

Onboard Memory:

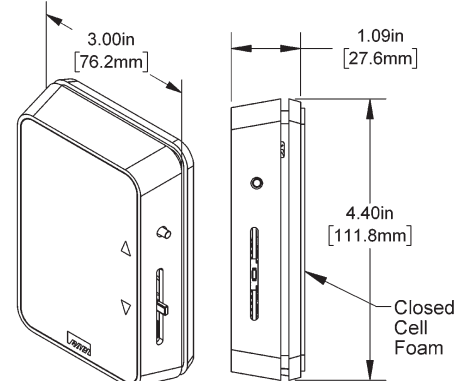
Sensor retains up to 16,000 readings should the communication become interrupted. If using a Gateway, the data is re-transmitted once communication is re-established.

Agency: RoHS / FCC: T4FSM220913 / IC: 9067A-SM220913

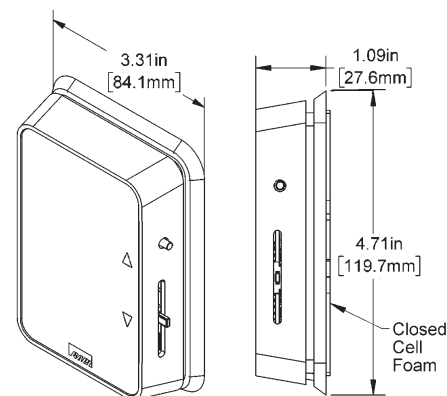
*In-building range is dependent on obstructions such as furniture and walls and the density of those materials. In wide open spaces, the distance may be greater; in dense spaces, the distance may be less.

**Actual battery life is dependent on the sensor's adjustable settings and environmental conditions.

***The available transmit intervals and sample intervals are different depending on whether the system is using a gateway or a receiver.



Standard Mounting Base



60mm Mounting Base

(Fits European wall boxes and junction boxes with 60mm mounting centers)

BAPI-Stat "Quantum" Units Calculated Battery Life**		
Transmit Interval	Sample Rate	Estimated Life (years)
30 sec	30 sec	1.12
1 min	1 min	1.89
3 min	1 min	3.83
5 min	5 min	7.08
10 min	5 min	8.93





Ordering Information

BATTERY POWER UNITS WITH STANDARD MOUNTING BASE

BA/WTH-BLE-Q-BAT

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Battery Power

BA/WTH-BLE-Q-S-BAT

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Battery Power

BA/WTH-BLE-Q-SO-BAT

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Override, Battery Power

BATTERY POWER UNITS WITH 60MM MOUNTING BASE

BA/WTH-BLE-Q60-BAT

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Battery Power, 60mm Base

BA/WTH-BLE-Q60-S-BAT

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Battery Power, 60mm Base

BA/WTH-BLE-Q60-SO-BAT

Wireless BAPI-Stat “Quantum” Temp/Hum Sensor, Setpoint, Override, Battery Power, 60mm Base

BA/LI14505: 3.6V Lithium Battery

WIRE POWER UNITS WITH STANDARD MOUNTING BASE

BA/WTH-BLE-Q-PWR

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Wire Power0

BA/WTH-BLE-Q-S-PWR

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Wire Power

BA/WTH-BLE-Q-SO-PWR

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Override, Wire Power

WIRE POWER UNITS WITH 60MM MOUNTING BASE

BA/WTH-BLE-Q60-PWR

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Wire Power, 60mm Base

BA/WTH-BLE-Q60-S-PWR

Wireless BAPI-Stat “Quantum” Temp/Humidity Sensor, Setpoint, Wire Power, 60mm Base

BA/WTH-BLE-Q60-SO-PWR

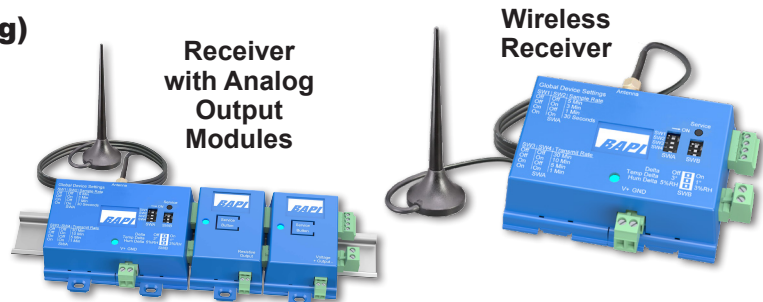
Wireless BAPI-Stat “Quantum” Temp/Hum Sensor, Setpoint, Override, Wire Power, 60mm Base



Wireless Receiver and Gateway

RECEIVER (Wireless-to-Analog)

The Wireless Receiver from BAPI receives the data from one or more wireless sensors. The data is then transferred to the Analog Output Modules and converted to an analog voltage or resistance. The receiver supports up to 32 sensors and up to 127 different Analog Output Modules.



GATEWAY

The Wireless Gateway from BAPI receives the data from one or more wireless sensors. The Gateway then provides the data to the cloud via MQTT. The Gateway also sends a confirmation signal to each sensor upon a successful reception of data. If the sensor doesn't receive this confirmation, it will retry its transmission to the Gateway. The Gateway supports up to 32 sensors.

