BAPI-Stat "Quantum" Temperature Sensor

900 MHz Wireless System

Features & Options

- BAPI-Stat "Quantum" unit with up to 275 foot in-building range*
- Optional temperature setpoint and occupant override
- Approximate 5 year battery life with 5 minute transmit rate
- Battery power or wired power
- Customizable transmission rate and transmission power for optimum battery life and reliability of each sensor
- Gateway provides data to the BAS via multiple communication options (TCP/IP, JSON, BACnet IP)

The BAPI-Stat "Quantum" 900 MHz Sensor measures the room temperature and transmits the data via 900MHz RF to a Gateway up to 275 feet away. It is available with optional setpoint and override.

The unit has an estimated battery life of 5 years with the default transmit rate of once every 5 minutes** for battery powered units. The unit can also be ordered with wired power rather than battery power. The transmitted temperature is picked up by a Gateway and supplied directly to the BAS via multiple communication options (TCP/IP, JSON, BACnet IP).

Sensor with optional Setpoint & Override

The unit is capable of storing all data in memory until it receives a successful reception signal from the Gateway, so that no data is lost during a communication interruption. Each sensor has customizable transmission rate and transmission power for optimum battery life and reliability. Additional transmissions can be triggered by a temperature change with a user-adjustable threshold. The system uses "smart logic" to find and secure a clean frequency channel rather than "frequency hopping".

Specifications

Power for Battery Powered Units: Two 3.6V Lith. batteries, 2,600 mAH, ~5 year battery life**

Power for Wired Power Units: 9 to 30 VDC, 50 mA max • 15 to 28 VAC, 50 mA max

Temperature Accuracy:
±0.36°F (±0.2°C) from built in thermistor

Transmitted Temperature Range:
-40 to 185°F (-40 to 85°C)

Transmission Distance: Up to 275 feet*

Environmental Operation Range:
Temp: 32 to 140°F (0 to 60°C)
Humidity: 5% to 95% RH non-condensing

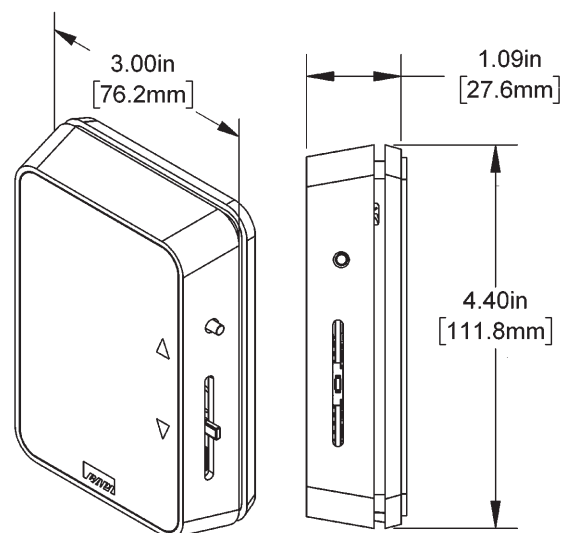**Enclosure Material & Rating:**
ABS Plastic, UL94 V-0

Frequency:
900 MHz (4 Channel, 7 MHz Spacing)

Transmission Interval:
5 minute default, user adjustable

Transmit Power: 0 dBm default, +5 dBm max

Receiver Sensitivity: -101 dBm

3.00in [76.2mm]

1.09in [27.6mm]

4.40in [111.8mm]

*Actual in-building transmission distances will vary depending upon building construction, transmission power setting and other factors.

**Actual battery life will vary depending upon transmission interval setting and transmission power setting.

Ordering Information

BA/WT900-Q............... BAPI-Stat "Quantum" Temp Sensor, Battery Power
BA/WT900-Q-PWR ..... BAPI-Stat "Quantum" Temp Sensor, Wired Power

BA/WT900-S-Q .... BAPI-Stat "Quantum" Temp Sensor w/ Temp Setpoint, Battery Power
BA/WT900-S-Q-PWR.. BAPI-Stat "Quantum" Temp Sensor w/ Temp Setpoint, Wired Power

BA/WT900-O-Q........... BAPI-Stat "Quantum" Temp Sensor w/ Override, Battery Power
BA/WT900-O-Q-PWR . BAPI-Stat "Quantum" Temp Sensor w/ Override, Wired Power

BA/WT900-SO-Q .... BAPI-Stat "Quantum" Temp Sensor w/ Setpoint & Override, Battery Power
BA/WT900-SO-Q-PWR. BAPI-Stat "Quantum" Temp Sensor w/ Setpoint & Override, Wired Power

BA/LI3620 .... 3.6V Lithium Battery

See end of Section F for list pricing.

900 MHz Gateway

The Gateway receives the data from sensors up to 275 feet away, and provides the data to the BAS via multiple communication options (TCP/IP, JSON, BACnet IP). The Gateway also sends a confirmation signal to each sensor upon a successful reception of data, allowing the sensor to release the data that it has stored in memory so that no data is lost during a communication interruption.