



### Features & Options

- Reduces temperature “spikes” from opening the freezer/cooler door
- Up to 275 foot in-building range\*
- Approximate 5 year battery life with 5 minute transmit rate
- 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 Wireless Thermobuffer 900 MHz Sensor is designed for walk-in freezers and coolers. It features a watertight BAPI-Box enclosure with a 1” hanging bracket chamber which is filled with customer-provided food grade glycol. This allows the unit to track the temperature of the contents, rather than the air.

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”.



**Unit with 1” Hanging Bracket**

### Specifications

**Power:** Two 3.6V Lithium batteries, 2,600 mAH, ~5 year battery life\*\*

**Temperature Accuracy:**  
 From 32 to 158°F (0 to 70°C): ±0.45°F (±0.25°C)  
 From -40 to 32°F (-40 to 0°C): ±1.0°F (±0.55°C)

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

**Barometric Pressure Sensor Accuracy:**  
 ±2 mbar @ 25°C (0.40”H<sub>2</sub>O)

**Transmission Distance:** Up to 275 feet\*

**Frequency:**  
 900 MHz (4 Channels, 7 MHz Spacing)

**Transmission Interval:**  
 5 minute default, user adjustable

**Transmit Power:** 0 dBm default, +5 dBm max

**Receiver Sensitivity:** -101 dBm

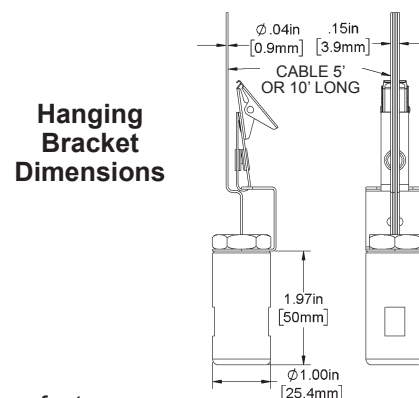
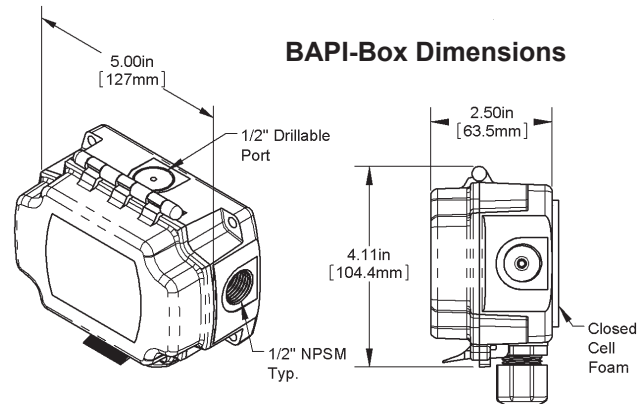
**Environmental Operation Range:**  
 Temp: -22°F to 158°F (-30°C to 70°C)  
 Humidity: 0% to 100% RH, Non-condensing

**Encl. Material, Encl. Rating and Material Rating:**  
 UV-Resistant Polycarbonate, NEMA 4, IP66 UL94 V-0

**Buffer Chamber Material:** 304 Stainless Steel

\*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.





# Thermobuffer Freezer Temperature Sensor

900 MHz Wireless System

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## Ordering Information

**BA/WT900-TB-M304-1-HB-5-BB**

Thermobuffer, 1" 304 SS Hanging Bracket w/ 5' FEP-Jacketed Cable

**BA/WT900-TB-M304-1-HB-10-BB**

Thermobuffer, 1" 304 SS Hanging Bracket w/ 10' FEP-Jacketed Cable

**BA/LI3620:**

3.6V Lithium Battery

*See end of Section F for list pricing.*

## 900 MHz Gateway

The Gateway receives the data from one or more 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.

