

Wireless Sensors

Rev. 12/20/10

Features & Options

- Reduces Temperature “Spikes” Caused By Opening the Cooler or Freezer Door
- Wirelessly Transmits the Temperature
- 100 Foot In-Building Range, Extendable to 1,000 Feet with a Repeater*
- Receiver & Output Modules Convert the Wireless Data to Voltage, Current or Thermistor Resistive
- Buffer Chamber is 304 Stainless or Aluminum
- 8 Year Battery Life
- 2 Year Warranty



Thermobuffer temperature sensor (2 inch probe shown)

The BAPI Wireless Thermobuffer wirelessly transmits the temperature of walk-in freezers or coolers to a receiver within 100 feet*. The Thermobuffer slows the temperature reaction of a freezer door opening to prevent false alarms or short cycling the compressor.

The Thermobuffer features a watertight BAPI-Box enclosure and is designed to be mounted to the wall of the cooler or freezer saving valuable shelf space. It is available with a two-inch or four-inch stainless steel buffer chamber (optional aluminum) which is sealed with customer provided oil, or a 50/50 glycol solution to approximate the temperature reaction of the refrigerated contents in the freezer or cooler.

Associated Products

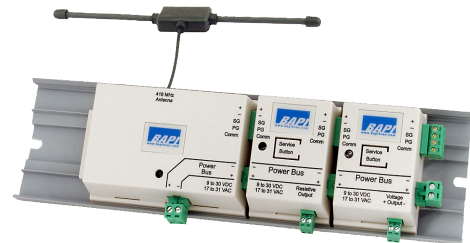
• **418 or 900 MHz Receiver**

Receives the RF signal from the transmitter or repeater and outputs the values to up to 127 different Analog Output Modules.

• **Repeater:**

Extends the range of the Transmitter up to 1,000 feet.

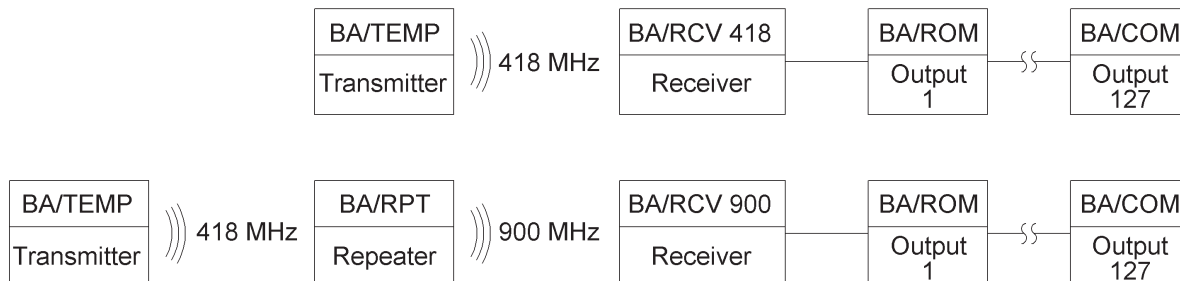
• **Analog Output Modules:** Converts the signal from the Receiver into a Resistance, Voltage or Current for the DDC controller.



418 MHz Receiver with two Analog Output Modules

Wireless Operation

The Wireless Thermobuffer measures the temperature through the buffer chamber and transmits the temperature approximately once every 10 seconds to a receiver which in-turn sends the signal to an analog output module. These output modules come in all the standard BAS analog inputs including Voltage, Current or Thermistor Resistance.



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Ordering Information

PART NUMBERS:

BA/WT-TB-M304-2-BB

Wireless Thermobuffer, 304 Stainless Steel Chamber, 2 inch probe, BAPI-Box Enclosure

BA/WT-TB-M304-4-BB

Wireless Thermobuffer, 304 Stainless Steel Chamber, 4 inch probe, BAPI-Box Enclosure

BA/WT-TB-MAL-2-BB

Wireless Thermobuffer, Machined Aluminum Chamber, 2 inch probe, BAPI-Box Enclosure

BA/WT-TB-MAL-4-BB

Wireless Thermobuffer, Machined Aluminum Chamber, 4 inch probe, BAPI-Box Enclosure

BA/LI3620

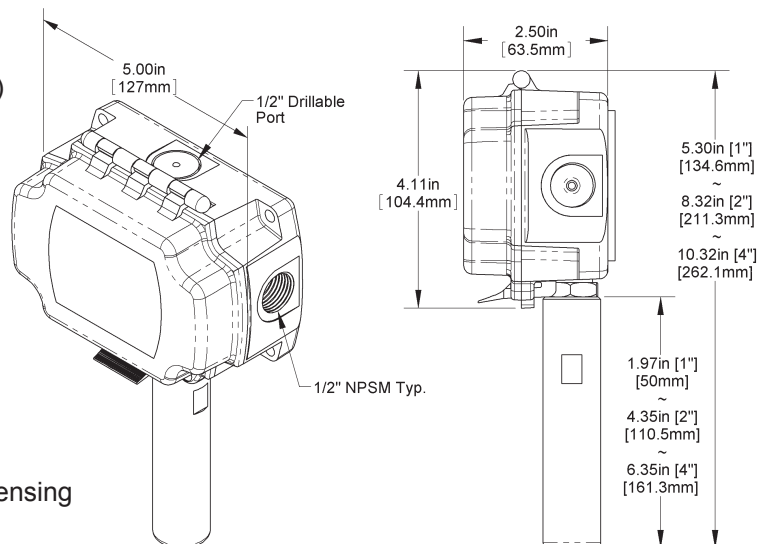
Replacement Battery, Lithium 3.6V

See end of Section H for list pricing.

Specifications

Supply Power: Two 3.6V Lithium batteries,**Battery Life:** 8 years at 10 second transmit rate**Battery capacity:** 2.25 AH**Sensor:** Built in thermistor**Accuracy:** $\pm 0.36^{\circ}\text{F}$ ($\pm 0.2^{\circ}\text{C}$)**Temperature Range:** -40°F to 185°F
(-40°C to 85°C)**Radio Frequency:** 418 MHz (US),
433 MHz (international)**Transmit Power:** 1.5mW**Transmit Time:** 20ms**Modulation:** Amplitude Modulation (AM)**A/D Resolution:** 12 Bit**Transmitter Interval:** ~10 seconds**Antenna:** Built inside the enclosure**Error checking:**CRC 16, Cyclic Redundancy
Check 16 bit**Agency:** FCC ID#T4F060811TEMP**Weight:** 2 lb (0.9kg)**Environmental Operation Range:**Temp: -22°F to 158°F (-30°C to 70°C)

Humidity: 0% to 100% RH, Non-condensing

Enclosure Rating: NEMA 4, IP66**Enclosure Material:** UV-Resistant Polycarbonate**Material Rating:** UL94 V-0**Probe:** 2 or 4 inch, $\frac{1}{4}$ " 304 Stainless Steel**Buffer chamber:** 2 or 4" 304 Stainless Steel
(Optional machined aluminum)**Warranty:** 2 Years*Note: Unit requires food grade glycol antifreeze for proper operation.*

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