

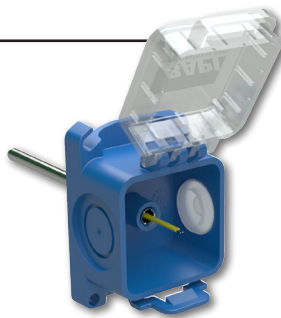


## Features & Options

- Fluid-Filled Chamber Tracks Temperature of Freezer or Cooler Contents, Not Air Temperature, Decreasing False Alarms
- Easy Wall Mount or Wire Shelf Hanger
- Available with Extreme Temp Sensor for -328 to 32°F (-200 to 0°C)

The BAPI Thermbuffer Temperature Sensor is used to simulate the refrigerator contents rather than the refrigerator air temperature. The fluid-filled chamber allows for slower reaction to abrupt temperature changes, yet still maintains long-term accuracy if the change remains permanent. It eliminates the temperature spikes due to frequent refrigerator or freezer door opening and decreases false alarms.

The Thermbuffer comes in three buffer sizes 1", 2" and 4" and is designed to save valuable shelf space by mounting to the wall or by hanger in a refrigerator or freezer. The buffer chamber is machined in 304 Stainless Steel or aluminum and accommodates a variety of temperature sensors or transmitters to interface with all BAS systems.



### The BAPI-Box Crossover

The new BAPI-Box Crossover enclosure features a hinged cover with thumb latch for easy termination. A pierceable knockout plug is available for the open port. See the Accessories section for more info.

*(Shown with knockout plug sold separately.)*



## Specifications

**Sensor:** Thermistor, RTD or Transmitter  
(See Sensors Section for specifications.)

**Probe:** Stainless steel

**Wire:** 22 awg stranded, 2 or 3 wires

**Insulation:**  
Etched Teflon or FEP-Jacketed; PTFE for 1K[1]

**Wiring to Probe:**  
Extreme Temp Probe 1K[1]: PTFE-Jacketed Cable, -328 to 32°F (-200 to 0°C)

**Buffer Chamber Construction:**  
M304: Bar stock 304 stainless steel  
MAL: Bar stock aluminum  
Hanging Bracket: Bar stock 304 stainless steel

**Chamber Fluid:** Customer supplied  
Glycol Mix, Food grade required  
1" Chamber: ~7 ml of fluid  
2" Chamber: ~24 ml of fluid  
4" Chamber: ~32 ml of fluid

*Note: Unit requires customer-supplied food grade glycol antifreeze for proper operation.*

### Enclosure Ratings:

BAPI-Box Crossover:  
IP10, NEMA 1 (IP44 with knockout plug in open port)

BAPI-Box 2: IP66, NEMA 4X

### Enclosure Material:

BAPI-Box 2: UV-resistant polycarb., UL94 V-0

BAPI-Box Crossover:  
Cover: Polycarbonate, UL94 V-0  
Base: Nylon, UL94 H

### Environmental Operating Range:

Standard Temp Sensor: -40 to 185°F (-40 to 85°C)  
Extreme Temp Sensor: -328 to 32°F (-200 to 0°C)  
Temp. Transmitter: -4 to 158°F (-20 to 70°C)  
Humidity: 0 to 100%RH, Condensing

**Agency:** CE, RoHS

### Encl. Dimensions: H x W x D

BAPI-Box Crossover: 3.1 x 2.2 x 1.9" (79 x 56 x 49mm)  
BAPI-Box 2: 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm)

*(For enclosure dimension drawings, see the end of the section.)*



# Thermobuffer Freezer/Cooler Sensor

# B61

## Temperature Sensors

Submittal sheets without List Prices are available on our website at [www.bapihvac.com](http://www.bapihvac.com)

Use the Option Selection Guide below to create your custom part number. Replace the number and parenthesis with the designator for each selection. Skip the designator and dashes for optional selections that are not required in your configuration.

### Thermobuffer Freezer/Cooler Sensor Option Selection Guide

BA/ (#1) - (#2) - (#3) - (#4) - (#5) - (#6)

#### #1: Temp Sensor (required)

#### List Price

1.8K .....	1.8K Thermistor .....	\$18
3K .....	3K Thermistor .....	\$18
10K-2 .....	10K-2 Thermistor .....	\$18
10K-3 .....	10K-3 Thermistor .....	\$18
10K-3[11K] .....	10K-3[11K] Thermistor .....	\$18
20K .....	20K Thermistor .....	\$18
1K[375] .....	1K Plat. RTD (375 curve).....	\$25
1K[NI] .....	1K Ω Nickel RTD .....	\$65
1K .....	1K Plat. RTD (385 curve).....	\$25

1K[1]..... 1K Plat. RTD, Extreme Temp, -328 to 32°F (-200 to 0°C), PTFE Insulation Leads (Call for availability and pricing)

1K Plat. RTD Transmitters below with 4 to 20 mA Output - require a BAPI-Box 2 Enclosure

T1K[32 TO 212F] ..	32 to 212°F Range .....	\$125
T1K[20 TO 120F] ..	20 to 120°F Range .....	\$125
T1K[0 TO 100F] .....	0 to 100°F Range .....	\$125
T1K[0 TO 100C] ...	0 to 100°C Range .....	\$125
T1K[-7 TO 49C] .....	-7 to 49°C Range .....	\$125
T1K[-18 TO 38C] ..	-18 to 38°C Range .....	\$125

Matched Transmitters are also available. Contact your BAPI representative for ordering.

Additional options are available for these units but not shown in this Selection Guide. Contact your BAPI representative for the complete list of options. Submittal sheets without List Prices can be downloaded from our website at [www.bapihvac.com](http://www.bapihvac.com)

#### #2: Buffer Material and Length (required)

TB-M304-1 .....	1" 304 SS Buffer (Overall length 1.9") .....	\$80
TB-M304-2 .....	2" 304 SS Buffer (Overall length 4.3") .....	\$192
TB-M304-4 .....	4" 304 SS Buffer (Overall length 6.3") .....	\$192
TB-MAL-2 .....	2" Aluminum Buffer (Overall length 4.3") .....	\$132
TB-MAL-4 .....	4" Aluminum Buffer (Overall length 6.3") .....	\$132

#### #3: Hanging Bracket Mounting (optional)

HB .....	Hanging Bracket (30" FEP-Jacketed Cable) .....	\$7
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#### #4: Enclosure Style (required)

BBX .....	BAPI-Box Crossover (IP10, NEMA 1) .....	\$0
BB2 .....	BAPI-Box 2 (IP66, NEMA 4X) .....	\$12
NB .....	No Box .....	\$0

#### #5: Custom Lead Length

(for HB and No Box units)

5 .....	5' of FEP-Jacketed Cable .....	\$5
10 .....	10' of FEP-Jacketed Cable .....	\$10
25 .....	25' of FEP-Jacketed Cable .....	\$25

#### #6: Test & Bal. or Terminal Strip (optional)

TB .....	Test & Balance Switch .....	\$7.50
TS .....	Terminal Strip Connection .....	\$7

(The \$7 does not apply to T1K units)

#### Example Number:

BA/ (10K-2) - (TB-M304-1) - ( ) - (BBX) - ( ) - ( ) = BA/10K-2-TB-M304-1-BBX

Description: 10K-2 Thermistor, Thermobuffer, 1" 304SS Buffer, BAPI-Box Crossover Enclosure.

List Price: \$18 (10K-2 Thermistor) + \$80 (1" SS Buffer) = \$98 List Price

Your Number: BA/

