# Remote Sensors & Probes ( )



**Temperature Sensors** 

Rev. 12/07/15

## Features & Options

- Etched Teflons Leads on Remote Sensors
- Plenum Cable or FEP Cable on Remote Probes
- Double Encapsulated Sensors on Remote Probes

BAPI Remote Sensors feature a .75" long encapsulation shell and etched Teflon leads in lengths of 6", 18", 5', 10', 15', 20', and 25'. Remote Sensors are perfect for tight locations. Additional cable options, lead lengths and probe styles are available.

Remote Probes feature a 1.75" long stainless steel probe with either Plenum-Rated Cable or FEP-Jacketed Cable. Lead lengths are 18", 5', 10', 15', 20', and 25'. Remote Probes are commonly used in refrigerated case or strap-on applications. They are ideal for hard-to-access areas or spaces where the usual Immersion or Duct Sensors do not fit well. Additional cable options, lead lengths and probe styles are available upon request.

Remote Sensors and Probes are available with a Weatherproof, BAPI-Box, BAPI-Box 2 or BAPI-Box 4 Enclosure.

## Pierceable Knockout Plug

A Pierceable Knockout Plug is available for the open port in the BAPI-Box 4 enclosure (and other enclosures). With the plug installed, the BAPI-Box 4 carries an IP44 rating. See "Accessories" for

more info.

Pierceable Knockout Plug

BAPI-Box 4 Remote Sensor with Plug Installed





**Remote Probe** Remote Probe with with Plenum Cable **FEP Cable** 





Weatherproof





**BAPI-Box 4** (BB4)

## **Specifications**

### **Environmental Operation Range:**

Temperature Sensor: -40 to 105 °C Temperature Transmitter: -20 to 70 °C Humidity: 0 to 100%, non-condensing

#### **Enclosure Material:**

WP: Cast Aluminum

BB & BB2: UV-resist. polycarb., UL94, V-0 BB4: Nylon & Plastic, UL94, V-0

### **Enclosure Rating:**

WP Model: NEMA 3R

BB & BB2 Models: IP66, NEMA 4

BB4 Models: IP10 (IP44 with Knockout Plug installed)

**Encl. Dimensions:** HxWxD

BAPI-Box (BB) 5 x 4.1 x 2.5" (127 x 104 x 63.5mm) BAPI-Box 2 (BB2) 4.9 x 2.8 x 2.35" (125 x 71.6 x 60mm) BAPI-Box 4 (BB4) 2.8 x 2.8 x 2.06" (72 x 71.4 x 52.3mm) 4.5 x 2.75 x 2.2" (114 x 70 x 55mm) Weatherproof (WP)

(For enclosure dimension drawings, turn to the end of the section.)

For detailed specifications on the Sensors & Transmitters, see the "Sensors" section.

\*All Passive Thermistors 20KΩ and smaller are CE compliant.



Sensor I	vne (Required)	Use the design	nator number	(shown to	the left in bold) to indicate the sensor
Selisoi	ype (Required)	Ose the desig	nator number	(SHOWH to	the left in bold) to mulcate the sensor
		THERMISTOR			RTDs
#	1.8K	1.8K Ω @ 25 °			1K Ω Platinum @ 0 °C, 3.75 Ω/°C temp. coeff.
	2.2K	2.2K Ω @ 25°			1K Ω Nickel @ 21°C, 5 Ω/°C temp. coeff.
	3K	3K Ω @ 25 °C		1K	1K $\Omega$ Platinum @ 0 °C, 3.85 $\Omega$ /°C temp. coeff.
	3.25K	3.25K Ω @ 25	°C (T30 type)	2K	2K Ω Silicon @ 20 °C, 8 Ω/°C temp. coeff.
	3.3K	$3.3$ K $\Omega$ @ $25$ $^{\circ}$			
	10K-2	10K Ω @ 25 °C			
	10K-3	10K Ω @ 25 °C	3		SEMICONDUCTORS
	10K-3[11K]	5,238 Ω @ 25	°C	334	LM334 Semiconductor
	20K	20K Ω @ 25 °C	3	592	AD592 Semiconductor, 273 µA @ 0 °C
	47K	47K Ω @ 25 °C	3	592-10K	AD592 Semicond. with10 kΩ shunt resistor,
	50K <sup>2</sup>	50K Ω @ 25 °C	3		2.73V @ 0 °C
	100K	100K Ω @ 25 °	°C		
		TEMPEDATU	DE TRANSMIT	TEDO+	
	T4V[renge]	TEMPERATURE TRANSMITTERS*  1K Platinum RTD, 1,000 $\Omega$ @ 0 °C with 4 to 20 mA Output			
	T1K[range]				
	T1KM[range]	10K Thermistor, 10,000 Ω @ 25 °C with 4 to 20 mA Output**			
	T10K[range]	, , ,			
		10K Thermistor, 10,000 Ω @ 25 °C with 0-5 VDC Output**  10K Thermistor, 10,000 Ω @ 25 °C with 0-10 VDC Output**			
	Truktu[range]	TUK THEITHISTO	1, 10,000 12 @	25 C WILLI	3-10 VDC Output
			RE TRANSMIT		
		Custom temperature transmitter ranges are available. Common ranges listed below			
		0 TO 100F -18 TO 38C			
		-4 TO 176F -20 TO 80C 40 TO 240 4 TO 116C			
		40 10 24	0 4 10 1160		
	Probe Type and Lead Length Required selection				
	-PP-6"		or - 6" Leads		
	-PP-18"		or - 18" Leads		
	-PP-5'		or - 5' Leads (		
	-PP-10'	Remote Sensor - 10' Leads (Plenum Rated Cable)			
	-PP-15'	Remote Sensor - 15' Leads (Plenum Rated Cable)			
	-PP-20'	Remote Sensor - 20' Leads (Plenum Rated Cable)			
	-PP-25'	Remote Sensor - 25' Leads (Plenum Rated Cable)			
	-RPP-6"	Remote Probe with Plenum Rated Cable - 6" Leads			
	-RPP-18"	Remote Probe with Plenum Rated Cable - 18" Leads			
	-RPP-5'	Remote Probe with Plenum Rated Cable - 5' Leads			
	-RPP-10'	Remote Probe with Plenum Rated Cable - 10' Leads			
	-RPP-15'	Remote Probe with Plenum Rated Cable - 15' Leads			
	-RPP-20'	Remote Probe with Plenum Rated Cable - 20' Leads			
	-RPP-25'	Remote Probe with Plenum Rated Cable - 25' Leads			
	-RPFEP-6"		with FEP Jack		
	-RPFEP-18"		with FEP Jack		
	-RPFEP-5'		with FEP Jack		
	-RPFEP-10'		with FEP Jack		
	-RPFEP-15'	Remote Probe			
	-RPFEP-20'	Remote Probe with FEP Jacketed Cable - 20' Leads			
	-RPFEP-25'	Remote Probe with FEP Jacketed Cable - 25' Leads			
	-RPFEP2-6"	Remote Probe with FEP Jacketed Cable (suitable for extended submersion) - 6" Leads			
	-RPFEP2-18"	Remote Probe with FEP Jacketed Cable (suitable for extended submersion) - 18" Leads			
	-RPFEP2-5'				(suitable for extended submersion) - 5' Leads
	-RPFEP2-10'		EED 1 1		(suitable for extended submersion) - 10' Leads
	-RPFEP2-15'				(suitable for extended submersion) - 15' Leads
	-RPFEP2-20'				(suitable for extended submersion) - 20' Leads
	-RPFEP2-25'	Remote Probe with FEP Jacketed Cable (suitable for extended submersion) - 25' Leads			
	1	Enclosure Type¹ Required for Temp. Transmitter units, optional for other units  -BB BAPI-Box Enclosure - IP66 rated, UV-resistant polycarbonate			
	1	-вв -ВВ2	BADI Boy 2	iciosure - IF	P66 rated, UV-resistant polycarbonate  IP66 rated, UV-resistant polycarbonate
	1	-502	BAPI-Roy 4	Enclosure	IP10 rated, nylon & plastic (Not for Transmitters)
	1	-BB4			Knockout Plug is installed in the open port.)
	1	-WP			
	1	-VVP			- NEMA 3R rated metal enclosure
	1		Options		ure is required lance Switch (BB or BB2 required, includes a Terminal :
	1		-TB		nance Switch (BB of BB2 required, includes a Terminal and available with Temp. Transmitter)
	1				Strip Connection (BB or BB2 required for units with
	1		-TS		or, RTD or Semiconductor)***
	1			111011111010	., 5 or connectination)
IPI F					
1PLE 10K-2	-PP-18"				

Call BAPI if you have questions about the above ordering/pricing grid or the configuration of the product you are ordering.





<sup>&</sup>lt;sup>1</sup>Temperature Transmitters require an enclosure. The enclosure is optional for Thermistors, RTDs and Semiconductors.

 $<sup>^2\</sup>text{The}$  50K  $\Omega$  Thermistor is not available for the Remote Sensor (-PP) configuration.

<sup>\*</sup>MATCHED Transmitter use Class A RTD's & are matched at 25%, 50% & 75% of calibrated scale limited to within -25°C to 150°C.

<sup>\*\*</sup>Range is limited to -40 to 185°F (-40 to 85°C)

<sup>\*\*\*</sup>TS option is not available with the 592-10K Semiconductor sensor or the T10K transmitters.