

TEMPERATURE | TRANSMITTERS | BULLET PROBE



BULLET PROBE

Remote Probes with Transmitters

The ACI Transmitter Bullet Probe Series features a two-wire, 4 to 20 mA loop powered output signal with an optional 3-Wire voltage output signal available. All transmitters include Zero and Span adjustments for field calibration and are calibrated using NIST Certified Calibration equipment. We recommend the use of an 18 to 22 AWG shielded cable for all temperature transmitter installations to help eliminate the possibility of noise being introduced onto the signal lines. The sensor assemblies are manufactured using a 2 conductor

unshielded FEP/FEP Plenum rated, unshielded cable and ACI's proven double encapsulation process to eliminate the effects of moisture on the sensors as well as increased response times using our high quality, thermally conductive epoxy. The Bullet Probe remote sensors include an optional 10 or 20 Foot Plenum rated cable for use in remote sensor applications. All TT100 and TT1K Series Bullet Probe transmitter's sensor leads may be shortened in the field as needed but all Matched TTM100 and TTM1K Series transmitter's sensor leads should not be shortened due to the affect that it would have on the calibration accuracy of the sensor and transmitter. Optional NEMA/IP rated weather proof enclosures are available as specified on the back of the product data sheet. For best accuracy, ACI recommends the use of the A/TTM Series Matched transmitters with 3 or 5 Point NIST Calibration Certificate, since they include a second calibration step in which the RTD and transmitter are calibrated together as a system.

Applications: Roof Top Units, Air Handlers, Discharge Air/Supply/Return/Mixed Air Duct Temperature, Remote Temperature Sensing.

The ACI Transmitter Bullet Probe Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's web site, workaci.com.

As to 32 VDC Reverse Polarity Protected 25 m minimum 250 Ohm Load: +13.5 to 32 VDC 500 Ohm Load: +18.5 to 32 VDC 300 Ohm Load: +18.5 to	PRODUCT SPECIFICATIONS			
Auxiliary Courter C	Transmitter Supply Voltage Supply	+8.5 to 32 VDC (Reverse Polarity Protected) 25 mA minimum		
Output Signals: Current: 4-20 mA (2-Wire Loop Powered) Voltage: 1-5 VDC or 2-10 VDC (3-Wires) Calibrated Accuracy Linearity*: Temp. Spans < 500°F (260°C): +/- 0.03% Thermal Drift*: Temp. Spans < 100°F (38°C): +/- 0.04%/°F Temp. Spans > 100°F (38°C): +/- 0.02% Minimum Calibrated Temperature Spans: Minimum Temp. Span: 50°F (28°C) Maximum Temp. Span: 400°F (204°C) Matched Calibrated Temperature Spans: 45 to 155°C (-49 to 311°F) (A/TTM models) Range: 45 to 155°C (-49 to 311°F) TMTM10/TTM1K Certification Points: 3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span Warm Up Time Warm Up Drift: 10 Minutes +/- 0.1% Transmitter Operating Temperature Range: 40°F to 185°F (-40 to 85°C) Connections Wire Size: Screw Terminal Block (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Connections Wire Size: Screw Terminal Block (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Sensor Type Sensor Curve Sensing Points: Platinum RTD PTC (Positive Temperature Coefficient) One Sensor Output @ 0°C (32°F): A/T100/TTM100 Series: 100 Ohms nominal A/T1K/TTM1K Series: 1000 Ohms nominal A/T10/TTM100 Series: 100 Ohms nominal A/T10/TTM100 Series:				
Calibrated Accuracy Linearity¹: Temp. Spans < 500°F (260°C): +/- 0.2% Thermal Drift²: Temp. Spans < 100°F (38°C): +/- 0.04% № F Temp. Spans > 100°F (38°C): +/- 0.02% Min./Max. Calibrated Temperature Spans: Minimum Temp. Span: 50°F (28°C) Maximum Temp. Span: 400°F (204°C) Matched Calibrated Temperature Spans (A/TTM models) Range: -45 to 155°C (-49 to 311°F) TrM100/TTM1K Certification Points: 3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span Warm Up Time Warm Up Drift: 10 Minutes +/- 0.1% Transmitter Operating Temperature Range: -40°F to 185°F (-40 to 85°C) Transmitter Operating Humidity Range: 0 to 90%, non-condensing Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Terminal Block Torque Rating: 0.37 ft-ib (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Platinum RTD PTC (Positive Temperature Coefficient) One Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): A/T100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: DIN EN 60751 (IEC 751) 3850 ppm / °C Sensor Stability: +/- 0.03% after 1000 Hours @ 300°C (572°F) Response Time (63% Step Change): 8 Seconds nominal Sensor Operating Temperature Range: -40 to 150°C (-40 to 302°F) **GD" Enclosure: Also Platic, July 4 VB, 30 to 100°C (-22 to 212°F), Plenum Rated "-88" Enclosure: Also Platic, July 4 VB, 30 to 100°C (-22 to 212°F), Plenum Rated "-88" Enclosure: Polystyren Plastic, July 4 VB, 30 to 100°C (-24 to 185°F), NEMA 3 R(IP 14) "-48" Enclosure: Polystyren Plastic, July 4 VB, 30 to 100°C (-24 to 185°F), NEMA 3 R(IP 14) "-48" Enclosure: Polystyren Plastic, July 4 VB, 30 to 100°C (-24 to 185°F), NEMA 3 R(IP 14) "-48" Enclosure: Polystyren Plastic, -40 to 70°C (-40 to 158°F), NEMA	Maximum Load Resistance:	(Terminal Voltage - 8.5 V) 0.020 A		
Thermal Drift²: Temp. Spans < 100°F (38°C): +/- 0.04%/°F Temp. Spans > 100°F (38°C): +/- 0.02% Min./Max. Calibrated Temperature Spans: Minimum Temp. Span: 50°F (28°C) Maximum Temp. Span: 400°F (204°C) Matched Calibrated Temperature Spans: 45 to 155°C (-49 to 311°F) (ATTIM models): Range: 45 to 155°C (-49 to 311°F) TAMINO/TTM1K Certification Points: 3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span Warm Up Time Warm Up Drift: 10 Minutes +/- 0.1% Transmitter Operating Temperature Range: -40°F to 185°F (-40 to 85°C) Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Terminal Block Torque Rating: 0.37 ft-lb (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Points: Platinum RTD PTC (Positive Temperature Coefficient) One Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ O°C (32°F): A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002° t)) where t is the absolute value of temperature above or below O°C in °C) Din Standard Temperature Coefficient: DIN EN 60751 (IEC 751) 3850 ppm / °C Sensor Stability: +/- 0.03% after 1000 Hours @ 300°C (Output Signals:	Current: 4-20 mA (2-Wire Loop Powered) Voltage: 1-5 VDC or 2-10 VDC (3-Wires)		
Min./Max. Calibrated Temperature Spans Matched Calibrated Temperature Spans (A/TTM models) Range: 45 to 155°C (-49 to 311°F) 45 to 155°C (-49 to 311°F) 3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span Warm Up Time Warm Up Drift: 10 Minutes +/- 0.19% Transmitter Operating Temperature Range: -40°F to 185°F (-40 to 85°C) Transmitter Operating Humidity Range: 5 Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Transmitter Operating Humidity Range: 0.37 ft.lb (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Platinum RTD PTC (Positive Temperature Coefficient) One Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): ATT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- 0°C = (0.15°C + (0.002 * t)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: 5 No Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- 0°C = (0.15°C + (0.002 * t)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: 5 No Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- 0°C = (0.15°C + (0.002 * t)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: 5 No Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal A/TT1	Calibrated Accuracy Linearity¹:	Temp. Spans < 500°F (260°C): +/- 0.2%		
Matched Calibrated Temperature Spans (A/TTM models) Range: 3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span Warm Up Time Warm Up Drift: 10 Minutes +/- 0.1% Transmitter Operating Temperature Range: -40°F to 185°F (-40 to 85°C) Transmitter Operating Humidity Range: 0 to 90%, non-condensing Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Terminal Block Torque Rating: 0.37 ft-lb (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Points: Two Red and Black (Non Polarity Sensitive) Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): A/TT100/TTM100 Series: 100 Ohms nominal A/TT11K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: DIN EN 60751 (IEC 751) 3850 ppm / °C Sensor Stability: +/- 0.03% after 1000 Hours @ 300°C (572°F) Response Time (63% Step Change): 8 Seconds nominal Sensor Operating Temperature Range: -40 to 150°C (-40 to 302°F) -40 to 150°C (-40 to 302°F) -40 to 150°C (-40 to 185°F), NEMA 1 (IP10) -40 "-PB" Enclosure: Albaminum, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) -44" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250° (6.35mm) 304 Stainless Steel Cord Grip Seal Material Flammability Rating: Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)	Thermal Drift²:	Temp. Spans < 100°F (38°C): +/- 0.04%/°F Temp. Spans > 100°F (38°C): +/- 0.02%		
A/TTM models Range: -45 to 155°C (-49 to 311°F) -45 to 155°C (-49 to 311°F) -46 to 185°C (-49 to 311°F) -47 to 195°C (-49 to 311°F) -48 to 195°C (-40 to 185°F), NEMA 3R (IP 110) -49 to 185°C (-40 to 185°F), NEMA 3R (IP 110) -49 to 185°C (-40 to 185°F), NEMA 3R (IP 14) -48 to 155°C (-40 to 158°F), NEMA 3R (IP 14) -48 to 155°C (-40 to 158°F), NEMA 3R (IP 14) -48 to 155°C (-40 to 158°F), NEMA 3R (IP 14) -48 to 150°C (-32 to 158°F), NEMA 3R (IP 14) -48 to 155°C (-49 to 158°F), NEMA 3R (IP 14) -49 to 169°C (-32°F) -40 to 160°C (-40 to 158°F), NEMA 3R (IP 14) -40 to 160°C (-40 to 158°F), NEMA 3R (IP 14) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 158°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66) -40 to 160°C (-40 to 168°F), NEMA 4X (IP 66)	Min./Max. Calibrated Temperature Spans:	Minimum Temp. Span: 50°F (28°C) Maximum Temp. Span: 400°F (204°C)		
Warm Up Time Warm Up Drift: 10 Minutes +/- 0.1% Transmitter Operating Temperature Range: -40°F to 185°F (-40 to 85°C) Transmitter Operating Humidity Range: 0 to 90%, non-condensing Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Terminal Block Torque Rating: 0.37 ft-lb (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Platinum RTD PTC (Positive Temperature Coefficient) One Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- 0°C = (0.15°C + (0.002 * lt)) where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: DIN EN 60751 (IEC 751) 3850 pmm / °C Sensor Operating Temperature Range: 40 to 150°C (-40 to 302°F) Response Time (63% Step Change): 8 Seconds nominal Sensor Operating Temperature Range: -40 to 150°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: Galvanized Steel, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: Albuminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Ranging: Neoprene IP68 (NEMA 4X)		-45 to 155°C (-49 to 311°F)		
Transmitter Operating Temperature Range:	TTM100/TTM1K Certification Points:	3 Point NIST: 20%, 50% & 80% of span 5 Point NIST: 20%, 35%, 50%, 65%, 80% of span		
Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2)	Warm Up Time Warm Up Drift:	10 Minutes +/- 0.1%		
Connections Wire Size: Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2) Terminal Block Torque Rating: 0.37 ft-lb (0.5 Nm) nominal Sensor Type Sensor Curve Sensing Platinum RTD PTC (Positive Temperature Coefficient) One Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): A/T100/TTM100 Series: 100 Ohms nominal A/T11K/TTM1K Series: 1000 Ohms nominal A/T10K/TTM1K Series: 1	Transmitter Operating Temperature Range:	:: -40°F to 185°F (-40 to 85°C)		
Sensor Type Sensor Curve Sensing Platinum RTD PTC (Positive Temperature Coefficient) One	Transmitter Operating Humidity Range:	0 to 90%, non-condensing		
Platinum RTD PTC (Positive Temperature Coefficient) One Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) Sensor Output @ 0°C (32°F): A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal A/T1K/TTM1K Series: 1000 Ohms nominal A/T1	Connections Wire Size:	Screw Terminal Blocks (Polarity Sensitive) 16 AWG (1.31 mm2) to 26 AWG (0.129 mm2)		
Number Wires Wire Colors: Number Wires Wire Colors: Two Red and Black (Non Polarity Sensitive) A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal +/- 0.06% Class A (Tolerance Formula: +/- ∘ C = (0.15 ∘ C + (0.002 * t)) where t is the absolute value of temperature above or below 0 ∘ C in ∘ C) Din Standard Temperature Coefficient: Din Enclosure Stability: A/T 0.03% after 1000 Hours @ 300 ∘ C (572 ∘ F) Sensor Operating Temperature Range: A/T 0.03% after 1000 Hours @ 300 ∘ C (572 ∘ F) Sensor Operating Temperature Range: A/T 0.03% after 1000 Hours @ 300 ∘ C (572 ∘ F) Sensor Operating Temperature Range: A/T 0.03% after 1000 Hours @ 300 ∘ C (572 ∘ F) Sensor Operating Temperature Range: A/T 0.03% after 1000 Hours @ 300 ∘ C (572 ∘ F) Sensor Operating Temperature Range: A/T 0 to 150 ∘ C (-40 to 302 ∘ F) "-GD" Enclosure: Galvanized Steel, -40 to 85 ∘ C (-40 to 185 ∘ F), NEMA 1 (IP10) "-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100 ∘ C (-22 to 212 ∘ F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85 ∘ C (-40 to 185 ∘ F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70 ∘ C (-40 to 158 ∘ F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: A/O to 80 ∘ C (-40 to 176 ∘ F) Operating Humidity Range: Probe Diameter Probe Material: Cord Grip Fitting Material Flammability Rating: Neoprene IP68 (NEMA 4X)	Terminal Block Torque Rating:	0.37 ft-lb (0.5 Nm) nominal		
A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal A/TT1K All All All All All All All All All Al	7	Platinum RTD PTC (Positive Temperature Coefficient) One		
### Accuracy: ### Accuracy: ### Accuracy: ### Accuracy: ### Accuracy: ### Accuracy: ### Accuracy: ### Accurac	Number Wires Wire Colors:	Two Red and Black (Non Polarity Sensitive)		
where t is the absolute value of temperature above or below 0°C in °C) Din Standard Temperature Coefficient: DIN EN 60751 (IEC 751) 3850 ppm / °C Sensor Stability:	Sensor Output @ 0°C (32°F):	A/TT100/TTM100 Series: 100 Ohms nominal A/TT1K/TTM1K Series: 1000 Ohms nominal		
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Sensor Stability: +/- 0.03% after 1000 Hours @ 300°C (572°F) Response Time (63% Step Change): 8 Seconds nominal -40 to 150°C (-40 to 302°F) "-GD" Enclosure: Galvanized Steel, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100°C (-22 to 212°F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Neoprene IP68 (NEMA 4X)		where $ t $ is the absolute value of temperature above or below 0°C in °C)		
Response Time (63% Step Change): 8 Seconds nominal -40 to 150°C (-40 to 302°F) "-GD" Enclosure: Galvanized Steel, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100°C (-22 to 212°F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Neoprene IP68 (NEMA 4X)	Din Standard Temperature Coefficient:	DIN EN 60751 (IEC 751) 3850 ppm / °C		
-40 to 150°C (-40 to 302°F) "-GD" Enclosure: Galvanized Steel, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100°C (-22 to 212°F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Polyamide 6.6 UL94-V2 Rating: Neoprene IP68 (NEMA 4X)	Sensor Stability:	+/- 0.03% after 1000 Hours @ 300°C (572°F)		
"-GD" Enclosure: Galvanized Steel, -40 to 85°C (-40 to 185°F), NEMA 1 (IP10) "-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100°C (-22 to 212°F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14) "-4X" Enclosure: Polystyrene Plastic, -40 to 70°C (-40 to 158°F), UL94-V2, NEMA 4X (IP 66) Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Neoprene IP68 (NEMA 4X)	Response Time (63% Step Change):	8 Seconds nominal		
### Enclosure Specifications (Operating Temperature, Material, Flammability, NEMA/IP Ratings :	Sensor Operating Temperature Range:	-40 to 150°C (-40 to 302°F)		
Storage Temperature Range: -40 to 80°C (-40 to 176°F) Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Polyamide 6.6 UL94-V2 Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)	Temperature,	"-PB" Enclosure: ABS Plastic, UL94 5VB, -30 to 100°C (-22 to 212°F), Plenum Rated "-BB" Enclosure: Aluminum, -40 to 85°C (-40 to 185°F), NEMA 3R (IP 14)		
Operating Humidity Range: 5 to 95% RH, non-condensing Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Rating: Polyamide 6.6 UL94-V2 Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)	Storage Temperature Range:			
Probe Diameter Probe Material: 0.250" (6.35mm) 304 Stainless Steel Cord Grip Fitting Material Flammability Polyamide 6.6 UL94-V2 Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)				
Cord Grip Fitting Material Flammability Polyamide 6.6 UL94-V2 Rating: Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)				
Cord Grip Seal Material NEMA/IP Rating: Neoprene IP68 (NEMA 4X)	Cord Grip Fitting Material Flammability	······································		
	· -	Neoprene IP68 (NEMA 4X)		



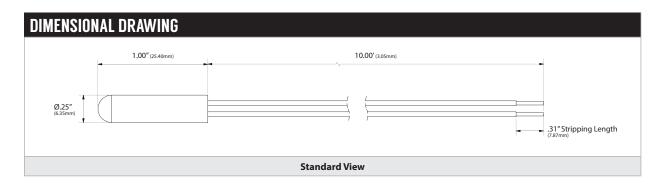




TEMPERATURE | TRANSMITTERS | BULLET PROBE

PRODUCT SPECIFICATIONS	
Lead Length Cable Diameter Conductor Size:	10' (3.05 m) or 20' (6.1 m) 0.106" nominal (2.69 mm) 22 AWG (0.65mm)
Lead Wire Insulation Wire Rating:	FEP/FEP Teflon Unshielded Cable UL CL2P or CL3P; CMP C(UL) US 150°C, FT-6
Conductor Material:	Tin Plated Copper
Product Dimensions Product Weight:	See table on back of Product Data sheet
Agency Approvals:	RoHS2, WEEE

Note¹: Transmitter's calibrated at 71°F (22°C) nominal | Note²: Temperature Drift is referenced to 71°F nominal calibration temperature



OPTIONAL SENSOR ORDERING Model # Example: A/ TT100 BP 1 1 PB 10'CL2P 0 to 40°C				
A. Sensor Series No Selection Required	A/	A/		
B. Model Series Select One (1)	TT100 = 100Ω TTM100 = Matched 100Ω* TT1K = 1KΩ TTM1K = Matched 1KΩ*			
C. Configuration No Selection Required	BP = 1" Stainless Steel Probe			
D. Output Signal Select One (1)	1 = 1 to 5 VDC 2 = 2 to 10 VDC 4 = 4 to 20 mA			
E. Enclosure Select One (1)	GD = Galvanized PB = Plastic BB = Aluminum, NEMA 3R 4X = NEMA 4X			
F. Lead Wire Type Select One (1)	= Standard 24" Etched PTFE Colored Leads 6'CL2P = 6 ft (1.83m), 2 Conductor Plenum Rated Cable 10'CL2P = 10 ft (3.05m), 2 Conductor Plenum Rated Cable 20'CL2P = 20 ft (6.10m), 2 Conductor Plenum Rated Cable			
G. Calibration Span	Specify Span in °F or °C (Best Accuracy in 100°F Increments)			

Note*: For TTM100 or TTM1k part numbers, the default NIST is 3 points | 5 points may be specified by using "-5PTNIST" at the end of any TTM part number.

ACCESSORIES ORDERING MOUNTING CLIPS				
Model #	ltem #	Description	Galvanized Metal	Plastic w/ Adhesive
A/MOUNTING CLIP-1/4"	143351	Hardware, ¼" Mounting Clip	•	
A/MOUNTING U-CLIP-1/4"	143352	Hardware, ¼" U-Mounting Clip Adhesive		•

ACCESSORIES ORDERING (NIST)		
Model #	Description	
-5PTNIST	5 Point Calibration & Certificate for TTM parts	





