WALL PLATES

Wall Plates with Transmitters

The ACI Transmitter Wall Plate Series features a two-wire, 4 to 20 mA loop powered output with optional 3-Wire voltage output signals 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 reduce the chances of noise being introduced onto the signal lines. The sensor assemblies are manufactured using colored Etched Teflon lead wires and ACI's proven double encapsulation process to eliminate the effects of moisture on the sensors as well as increase the thermal response times using our high quality, thermally conductive epoxy. The wall plate transmitters are designed to be mounted over a standard single gang junction box or hole in the wall and includes a foam pad to reduce the effects of self-heating from the transmitter and thermal drafts from within the wall. 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. Optional tamper proof mounting screws and screw driver bits are available to keep people from removing the plates from the wall. Please contact ACI for more information regarding these transmitters or if you would like to discuss your application in further detail. Other options may be available upon request.

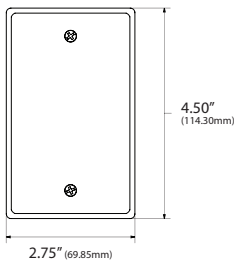
Applications: Space Temperature Sensing, Office Buildings, Hallways, Schools, Gyms, Manufacturing Plants, Clean Rooms, Pharmaceutical, Hospitals, Secure Installations

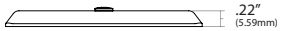
PRODUCT SPECIFICATIONS

Transmitter Supply Voltage | Supply Current:	+8.5 to 32 VDC (Reverse Polarity Protected) | 25 mA minimum **250 Ohm Load:** +13.5 to 32 VDC | **500 Ohm Load:** +18.5 to 32 VDC
Maximum Load Resistance:	(Terminal Voltage - 8.5 V) | 0.020 A
Output Signals:	**Current:** 4-20 mA (2-Wire Loop Powered) | **Voltage:** 1-5 VDC or 2-10 VDC (3-Wires)
Calibrated Transmitter Accuracy | Linearity[1]:	**Temp. Spans < 500°F (260°C):** +/- 0.2%
Temperature Drift[2]:	**Temp. Spans < 100°F (38°C):** +/- 0.04%/°F | Temp. Spans > 100°F (38°C): +/- 0.02%
TTM100/TTM1K Certification Points:	**3 Point NIST:** 20%, 50% & 80% of span | **5 Point NIST:** 0%, 20%, 50%, 80% & 100% of span
Warm Up Time | Warm Up Drift:	10 Minutes | +/- 0.1%
Calibrated Temperature Spans[1]:	**Minimum Temp. Span:** 50°F (28°C) | **Maximum Temp. Span:** 200°F (93°C)
Connections | Wire Size:	Screw Terminal Blocks | 16 AWG (1.31 mm^2) to 26 AWG (0.129 mm^2)
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 | **A/TT100/TTM100-SP:** Brown/Brown | **A/TT1K/TTM1K-SP:** Black/Black
Sensor Output @ 0°C (32°F):	**A/TT100/TTM100-SP:** 100 Ohms nominal | **A/TT1K/TTM1K-SP:** 1000 Ohms nominal
RTD Tolerance Class | Sensor Accuracy:	+/- 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 (572vF)
Response Time (63% Step Change):	20 Seconds nominal
Operating Temperature Range:	35°F to 160°F (1.5 to 71°C)
Storage Temperature Range:	-40 to 160°F (-40 to 71°C)
Operating Humidity Range:	5 to 90% RH, non-condensing
Plate Material:	430 Stainless Steel (Brushed Stainless Steel Finish)
Foam Pad Material | Flammability Rating:	Neoprene/EPDM/SBR Polymer | UL94-HBF; FMVSS-302; MIL-R-6130C
Lead Length | Conductor Size:	14" (35.6 cm) | 22 AWG (0.65 mm)
Lead Wire Insulation | Wire Rating:	Etched Teflon (PTFE) Colored Leads | Mil Spec 16878/4 Type E
Conductor Material:	Silver Plated Copper
Product Dimensions (L x W x D):	4.50" (114.3 mm) x 2.78" (70.6 mm) x 1.00" (25.4 mm)
Product Weight:	0.19 lbs. (86.2 g)
Agency Approvals[3]:	RoHS2, WEEE

Note[1]: Transmitter's calibrated at 71°F (22°C) nominal | **Note[2]:** Temperature Drift is referenced to 71°F nominal calibration temperature

DIMENSIONAL DRAWING





Front View | **Right View** | **Top View**

STANDARD ORDERING

Model # Example: A/TT100-SP-2 -OR- 118450

Model #	Item #	Description
A/TT100-SP-1**	142559	TT100 Stainless Plate; 100 Ohm RTD; 1-5 VDC (3-Wire) Output; Foam Pad
A/TT100-SP-2**	118450	TT100 Stainless Plate; 100 Ohm RTD; 2-10 VDC (3-Wire) Output; Foam Pad
A/TT100-SP-4**	118451	TT100 Stainless Plate; 100 Ohm RTD; 4-20 mA (2-Wire) Output; Foam Pad
A/TTM100-SP-1**	134459	TTM100 Matched Sensor/Transmitter; Stainless Plate; 1-5 VDC (3-Wire) Output, Foam Pad*
A/TTM100-SP-2**	142560	TTM100 Matched Sensor/Transmitter; Stainless Plate; 2-10 VDC (3-Wire) Output, Foam Pad*
A/TTM100-SP-4**	118904	TTM100 Matched Sensor/Transmitter; Stainless Plate; 4-20 mA (2-Wire) Output, Foam Pad*
A/TT1K-SP-1**	118661	TT1K Stainless Plate; 1K Ohm RTD; 1-5 VDC (3-Wire) Output; Foam Pad
A/TT1K-SP-2**	118663	TT1K Stainless Plate; 1K Ohm RTD; 2-10 VDC (3-Wire) Output; Foam Pad
A/TT1K-SP-4**	118664	TT1K Stainless Plate; 1K Ohm RTD; 4-20 mA (2-Wire) Output; Foam Pad
A/TTM1K-SP-1**	142561	TTM1K Matched Sensor/Transmitter; Stainless Plate; 1-5 VDC (3-Wire) Output, Foam Pad*
A/TTM1K-SP-2**	118982	TTM1K Matched Sensor/Transmitter; Stainless Plate; 2-10 VDC (3-Wire) Output, Foam Pad*
A/TTM1K-SP-4**	118983	TTM1K Matched Sensor/Transmitter; Stainless Plate; 4-20 mA (2-Wire) Output, Foam Pad*

CUSTOM ORDERING

Model # Example: A/ (A.) TT100 (B.) SP (C.) 1 (D.) 40 to 90°C (E.)

		MODEL #
A. Sensor Series *No Selection Required*	**A/** →	**A/**
B. Model Series *Select One (1)*	**TT100** = 100Ω | **TTM100*** = Matched 100Ω | **TT1K** = 1KΩ | **TTM1K*** = Matched 100Ω	
C. Configuration *No Selection Required*	**SP** = 1 Gang Stainless Steel Wall Plate →	**SP**
D. Output Signal *Select One (1)*	**1** = 1 to 5 VDC | **2** = 2 to 10 VDC | **4** = 4 to 20 mA	
E. Calibrated Span**	**Specify Span in °F or °C (Best Accuracy in 100°F Increments)**	

Note*: Must specify a 3 or 5 Point NIST Certificate with the TTM100 or TTM1K Transmitter above

ACCESSORIES ORDERING

Model # Example: SCREW, TAMPER PROOF -OR- 105094

Model #	Item #	Description
SCREW, TAMPER PROOF	105094	Screw, Tamper Proof, #6 x 5/8", Zinc Plated, Flat Head, 1/8"
SCREWDRIVER INSERT BIT	143067	Screwdriver Bit, Tamper Proof Screw, 5/64