## TEMPERATURE | TRANSMITTERS | WALL PLATES



## 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.

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

The ACI Transmitter Wall Plate 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.

Transmitter Supply Voltage	+8.5 to 32 VDC (Reverse Polarity Protected)   25 mA minimum	
Supply Current:	<b>250 Ohm Load:</b> +13.5 to 32 VDC   <b>500 Ohm Load:</b> +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 <sup>1</sup>	: Temp. Spans < 500°F (260°C): +/- 0.2%	
Temperature Drift²:	Temp. Spans < 100°F (38°C): +/- 0.04%/°F   Temp. Spans > 100°F (38°C): +/- 0.02%	
TTM100/TTM1K Certification Points:	<b>3 Point NIST:</b> 20%, 50% & 80% of span   <b>5 Point NIST:</b> 20%, 35%, 50%, 65% & 80% of span	
Warm Up Time   Warm Up Drift:	10 minutes   +/- 0.1%	
Calibration Temperature Spans <sup>1</sup> :	Minimum Temp. Span: 50°F (28°C)   Maximum Temp. Span: 200°F (93°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 N-3m) 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	
DTD Toloronso Class   Conser Assurance	+/- 0.06% Class A   <b>(Tolerance Formula:</b> +/- °C = (0.15°C + (0.002 *  t ))	
RTD Tolerance Class   Sensor Accuracy:	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:	RoHS2, WEEE	

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



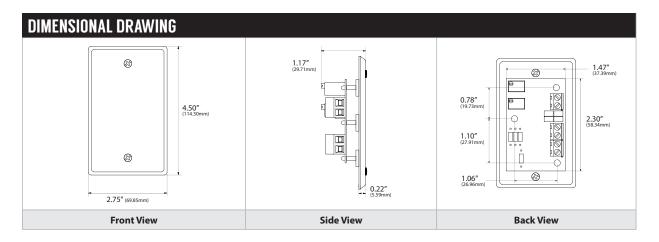






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CESSORIES ORDERING		
Model #	Item #	Description
A/TT100-SP-1	142559	TT100 Stainless Plate; 100 Ohm RTD; 1-5 VDC (3-Wire) Output; Foam Pad
A/TT100-SP-2	118450	TT100 Stainless Plate; 100 Ohm RTD; 2-10 VDC (3-Wire) Output; Foam Pad
A/TT100-SP-4	118451	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 #
A. Sensor Series <sup>1</sup> No Selection Required	A/	A/
B. Model Series Select One (1)	$TT100 = 100\Omega \   \ TTM100 = Matched \ 100\Omega^* \   \ TT1K = 1K\Omega \   \ TTM1K = Matched \ 1K\Omega^*$	
C. Configuration No Selection Required	SP = 1 Gang Stainless Steel Wall Plate	SP
D. Output Signal Select One (1)	<b>1</b> = 1 to 5 VDC   <b>2</b> = 2 to 10 VDC   <b>4</b> = 4 to 20 mA	
E. Calibrated Span	Specify Span in °F or °C (Best Accuracy in 100°F Increments³)	

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				
Model #	Item #	Description		
A/TAMPER PROOF SCREWS	144865	Two (2) Screws, Tamper Proof, #6 x %", Zinc Plated, Flat Head, 1/8"		
SCREWDRIVER INSERT BIT	143067	Screwdriver Bit, Tamper Proof Screw, 5/4		

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





