



# BOARD ONLY

## Calibrated Transmitter, No Sensor

The ACI Transmitter Board Only Series features a two-wire, 4 to 20 mA loop powered output signal with optional 3-Wire voltage output signals available. Sensors are not included with the board only transmitter since they are designed to be used with any existing 100 or 1000 Ohm Platinum RTD sensor with a 385 temperature coefficient. All transmitters must be ordered with the temperature span that you require, since the boards are tuned to give you the best performance characteristics for the temperature span specified. Zero and Span adjustments are available for recalibration in the field when using NIST Certified equipment. ACI recommends

the use of an 18 to 22 AWG shielded cable for all temperature transmitter installations to protect against the introduction of noise onto the signal lines. ACI does offer recalibration services for any transmitters sent back to us for a nominal fee.

**Applications:** Replacement Temperature Transmitters, High Moisture and Corrosive Environments, Conversion of existing Platinum 2 or 3 Wire RTD's to linear current or voltage output signal, transmit signals over long wire runs

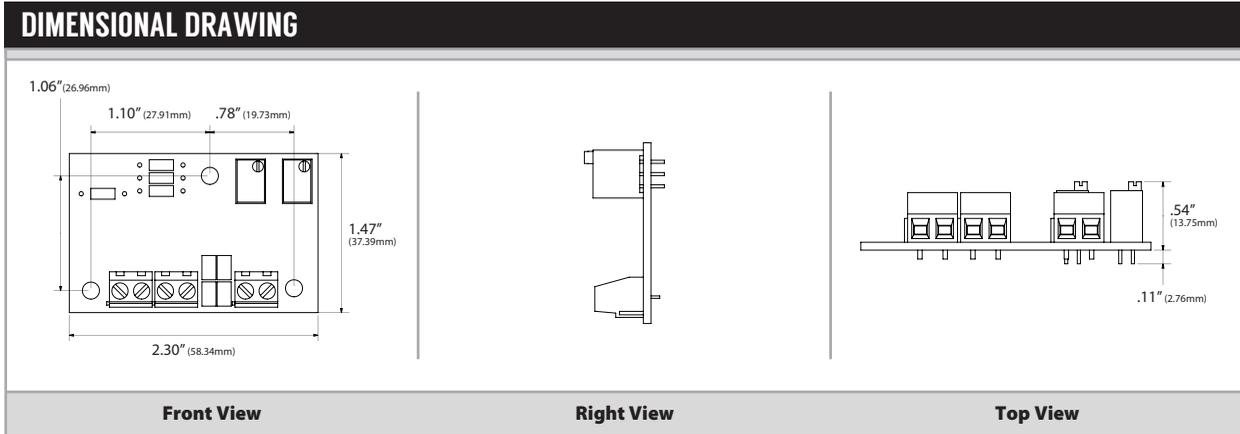
**The ACI Transmitter Board Only Series is covered by ACI's Five (5) Year Limited Warranty. The warranty can be found in the front of ACI's Sensors & Transmitters catalog, as well as on ACI's website, [www.workaci.com](http://www.workaci.com).**

### PRODUCT SPECIFICATIONS

<b>Transmitter Supply Voltage   Supply Current:</b>	+8.5 to 32 VDC (Reverse Polarity Protected)   25 mA minimum
	<b>250 Ohm Load:</b> +13.5 to 32 VDC   <b>500 Ohm Load:</b> +18.5 to 32 VDC
<b>Maximum Load Resistance:</b>	(Terminal Voltage - 8.5 V) / 0.020 A
<b>Transmitter Output Signals:</b>	<b>Current:</b> 4-20 mA (2-Wire, Loop Powered)   <b>Voltage:</b> 1-5 VDC or 2-10 VDC (3-Wires)
<b>Calibrated Accuracy   Linearity <sup>1</sup>:</b>	<b>Temp. Spans &lt; 500°F (260°C):</b> +/- 0.2%   <b>Temp. Spans &gt; 500°F (260°C):</b> +/- 0.5%
<b>Temperature Drift <sup>2</sup>:</b>	<b>Temp. Spans &lt; 100°F (38°C):</b> +/- 0.04%/°F   <b>Temp. Spans &gt; 100°F (38°C):</b> +/- 0.02%
<b>TTM100/TTM1K Certification Points:</b>	<b>3 Point NIST:</b> 20%, 50% & 80% of span   <b>5 Point NIST:</b> 20%, 35%, 50%, 65%, 80% of span
<b>Calibrated Temperature Spans <sup>1</sup>:</b>	<b>Minimum Temp. Span:</b> 50°F (28°C)   <b>Maximum Temp. Span:</b> 1000°F (538°C)
<b>Sensor Type Accepted   Sensor Curve:</b>	Platinum RTD   PTC (Positive Temperature Coefficient)
<b>Sensor Resistance Characteristics (Nominal):</b>	<b>A/TT100 Series:</b> 100 Ohms @ 32°F (0°C)   <b>A/TT1K Series:</b> 1000 Ohms @ 32°F (0°C)
<b>Sensor Din Standard   Temperature Coefficient:</b>	DIN EN 60751 (IEC 751)   3850 ppm / °C
<b>Warm Up Time   Warm Up Drift:</b>	10 Minutes   +/- 0.1%
<b>Operating Temperature Range:</b>	-40°F to 185°F (-40 to 85°C)
<b>Storage Temperature Range:</b>	-40 to 80°C (-40 to 176°F)
<b>Operating Humidity Range:</b>	0 to 90%, non-condensing
<b>Connections   Wire Size:</b>	Screw Terminal Blocks (Polarity Sensitive)   16 AWG (1.31 mm <sup>2</sup> ) to 26 AWG (0.129 mm <sup>2</sup> )
<b>Terminal Block Torque Rating:</b>	0.37 ft-lb (0.5 Nm) nominal
<b>Mounting Configuration:</b>	Three Adhesive Standoffs included
<b>Standoff Material Type   Flammability Rating:</b>	Nylon 66   UL94-V2
<b>Standoff Temperature Rating:</b>	-40 to 85°C (-40 to 185°F)
<b>Standoff Dimensions:</b>	0.70" (17.8 mm) x 0.70" (17.8 mm) x 0.65" (16.5 mm)
<b>Product Dimensions (L x W x H)   Product Weight:</b>	2.30" (58.42 mm) x 1.478" (37.54 mm) x 0.775" (19.69 mm)   0.034 lbs. (15.4 g)
<b>Agency Approvals:</b>	RoHS2, WEEE

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





### STANDARD ORDERING

Model # Example: **A/TT100-BO-4** -OR- **118462**

Model #	Item #	Description
<b>A/TT100-BO-1</b>	118459	TT100 Board Only with 1-5 VDC Output and Adhesive Standoffs (Specify Temperature Span)
<b>A/TT100-BO-2</b>	118460	TT100 Board Only with 2-10 VDC Output and Adhesive Standoffs (Specify Temperature Span)
<b>A/TT100-BO-4</b>	118462	TT100 Board Only with 4-20 mA Output and Adhesive Standoffs (Specify Temperature Span)
<b>A/TT1K-BO-1</b>	118689	TT1K Board Only with 1-5 VDC Output and Adhesive Standoffs (Specify Temperature Span)
<b>A/TT1K-BO-2</b>	118692	TT1K Board Only with 2-10 VDC Output and Adhesive Standoffs (Specify Temperature Span)
<b>A/TT1K-BO-4</b>	118694	TT1K Board Only with 4-20 mA Output and Adhesive Standoffs (Specify Temperature Span)

### CUSTOM ORDERING

Model # Example: **A/ TT100 BO 1 0 to 40°C**

		MODEL #
<b>A. Sensor Series</b> <i>No Selection Required</i>	<b>A/</b> <span style="border-bottom: 1px solid black; display: inline-block; width: 150px;"></span>	<b>A/</b>
<b>B. Model Series</b> <i>Select One (1)</i>	<b>TT100</b> = Accepts 100 Ohm Platinum RTD   <b>TT1K</b> = Accepts 1K Ohm Platinum RTD	
<b>C. Configuration</b> <i>No Selection Required</i>	<b>BO</b> = Board Only <span style="border-bottom: 1px solid black; display: inline-block; width: 150px;"></span>	<b>BO</b>
<b>D. Output Signal</b> <i>Select One (1)</i>	<b>1</b> = 1 to 5 VDC   <b>2</b> = 2 to 10 VDC   <b>4</b> = 4 to 20 mA	
<b>E. Calibrated Span</b>	<b>Specify Span in °F or °C (Best Accuracy in 100°F Increments)</b>	

