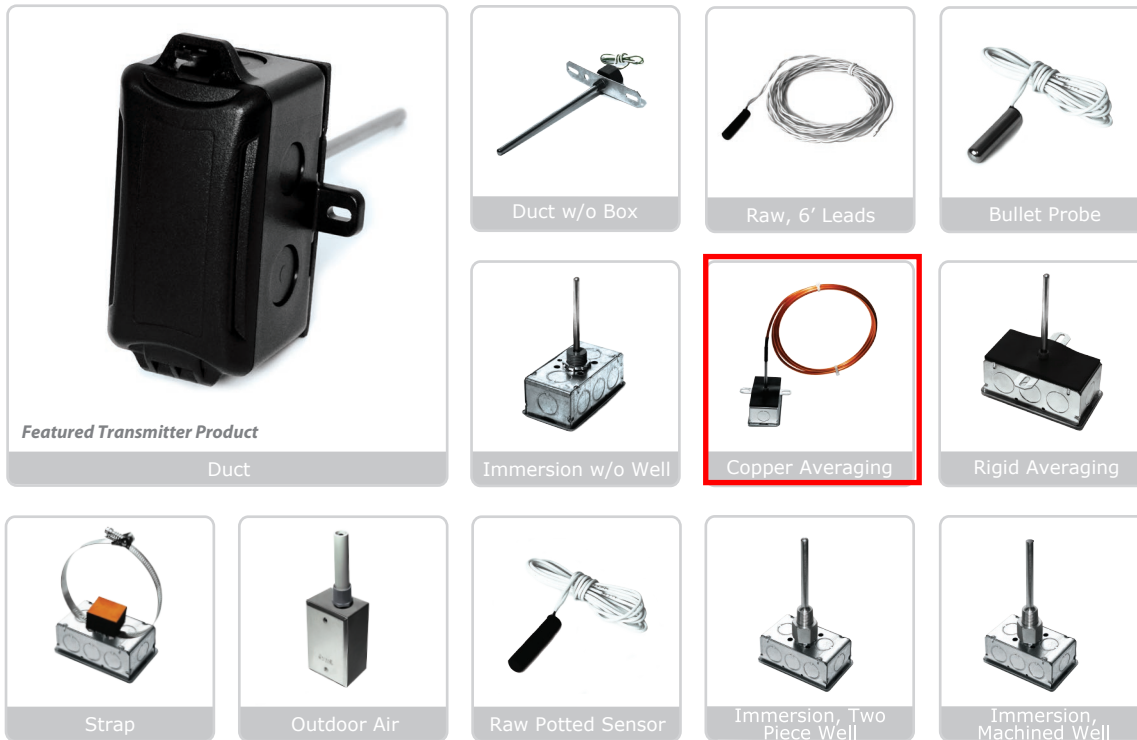




## SSA Comment #16

\*Note: Final Sensor length will be determined in the field to provide the best possible coverage. The sensor length will either be 50', 80' or 100'.



# TRANSMITTERS

## General Mounting

ACI offers a comprehensive selection of general mounting configurations for Transmitters (see list above). These sensors provide a predictable and accurate output over the specified temperature range. Each sensor configuration is designed and manufactured for long-term quality and performance. ACI incorporates standard features such as double encapsulation and etched Teflon leads where applicable. The ACI A/TTM Series offers a matched calibration of the sensor & transmitter, which improves the measurement accuracy. An N.I.S.T. certificate is provided with all A/TTM Series devices. Robust, high-end performance in addition to N.I.S.T certification makes this series suitable for applications such as pharmaceutical or scientific laboratories.

The ACI Transmitter 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, [www.workaci.com](http://www.workaci.com).



## SPECIFICATIONS

Supply Voltage	8.5 to 32 VDC   249 Ohm Load: +13.5 to 32 VDC   499 Ohm Load: +18.5 to 32 VDC
Output Current	25 mA
Transmitter Transmitter Input	2-wire Platinum 100/1K Ohm Class A RTD
Transmitter Transmitter Output	2-wire, Linear 4 to 20 mA DC Current (standard), 1 to 5 VDC, or 2 to 10 VDC
Calibrated Accuracy	+/-0.2% of full scale for spans <500°F (275°C)   +/-0.5% of full scale for spans >500°F (275°C)
Temperature Effect	+/-0.02% of full scale for spans >100°F (55°C)   +/-0.04% of full scale for spans <100°F (55°C)
Transmitter Operating Temperature	-40 to 185°F (-40 to 85°C)
Transmitter Operating Humidity	0-90% RH non-condensing
Minimum Calibration Span	50°F (28°C)
Operating Temperature Range	Single Point: -58 to 392°F (-50 to 200°C)   Averaging: -50 to 275°F (-45.5 to 134.8°C)
Sensor Outputs	[1]: 1 to 5 VDC   [2]: 2 to 10 VDC   [4]: 4 to 20 mA
Product Dimensions	Please reference pages 5, 6, 7 & 8

## ORDERING

Select one Series (A), one Configuration (B), one Length (C), one Output (D) & one Enclosure (E). **NOTE:** See Thermowell data sheet for proper well selection for all Immersion related sensors. Enclosure options (E) include Plastic Box (PB), Galvanized Box (GD), NEMA 3R (BB), NEMA 4X (4X), & Euro Housing (EH). The Plastic Box (PB) is rated from 0 to 203°F. Once a Sensor Series (A) has been selected, stay within the same row when choosing a Configuration (B) & Length (C). Choose 1 Output (D). When selecting an Enclosure option (E). Stay in previous row as your B & C selections. ▶ Please specify a temperature span for each transmitter configuration ordered. Three point calibration certifications are standard for all A/TTM part numbers, however, five point calibration certifications can be ordered separately. See (1) below.

## A Sensor Series

☐ A/TT100 ☐ A/TT1K ☐ A/TTM100 (Matched Transmitter) ☒ A/TTM1K (Matched Transmitter)

## B Configuration

- ☐ D (Duct) ▶  
☐ DO (Duct w/o Box) ▶  
☐ I (Immersion, Two Piece Well) ▶  
☐ IM (Immersion, Machined Well) ▶  
☐ INW (Immersion w/o Well) ▶  
☒ A (Copper Averaging) ▶  
☐ RA (Rigid Averaging) ▶  
☐ S (Strap) ▶  
☐ O (Outdoor Air) ▶  
☐ W (Raw Potted Sensor) ▶  
☐ W-6' (Raw w/6' Leads) ▶  
☐ BP (Bullet Probe) ▶  
☐ BO (Board Only) ▶

## C Length

- ☐ 4" ☐ 6" ☐ 8" ☐ 12" ☐ 18" ▶  
☐ 4" ☐ 6" ☐ 8" ☐ 12" ☐ 18" ▶  
☐ 2.5" ☐ 4" ☐ 6" ▶  
☐ 1" ☐ 2.5" ☐ 4" ☐ 6" ☐ 12" ▶  
☐ 2.5" ☐ 4" ☐ 6" ☐ 12" ▶  
☐ 8' ☐ 12' ☐ 24' ☒ 50' ☐ 80' ☐ 100' ▶  
☐ 18" ☐ 24" ☐ 36" ▶  
☐ ---- (No Length) ▶  
☐ ---- (No Length) ▶  
☐ ---- (No Length) ▶  
☐ ---- (No Length) ▶  
☐ ---- (No Length) ▶  
☐ ---- (No Length) ▶

## D Output

- ☐ 1 (1 to 5 VDC)  
☐ 2 (2 to 10 VDC)  
☒ 4 (4 to 20 mA)

## E Enclosure

- ☐ PB ☐ GD ☐ BB ☐ 4X ☐ EH  
☐ ---- (No Enclosure)  
☐ PB ☐ GD ☐ BB ☐ 4X ☐ EH  
☐ PB ☐ GD ☐ BB ☐ 4X ☐ EH  
☐ PB ☒ GD ☐ BB ☐ 4X ☐ EH  
☐ PB ☐ GD ☐ BB ☐ 4X ☐ EH  
☐ PB ☐ GD ☐ ---- ☐ 4X ☐ EH  
☐ ---- ☐ ---- ☐ BB ☐ 4X ☐ ----  
☐ ---- (No Enclosure)  
☐ ---- (No Enclosure)  
☐ ---- (No Enclosure)  
☐ ---- (No Enclosure)

## 1 Calibration Option for A/TTM orders (Additional Accessories)

- ☐ ---- (Default) 3 Point Calibration Certification (Points: 20, 50 & 80% of Span)  
☐ NIST TTM CERT-5PT. (Points: 0, 20, 50, 80 & 100% of Span)

## BUILD PART NUMBER

After completing (A), (B), (C), (D) & (E) from the above table, fill in the "Part Number Table" below. (1) is an additional configuration. An example part number is provided. Please indicate calibration span.

A	B	C	D	E
EXAMPLE: A/TT1K - D - 6" - 4 - GD				
CALIBRATION SPAN: 30 to 130				
1				
EXAMPLE: NIST TTM CERT-5PT.				

The ACI Mars Plastic Duct housing (PB) has been tested to and complies with the requirements specified in the UL 2043 Standard for Fire Test for heat and visible smoke release for discrete products and their accessories installed in air-handling spaces. The Plastic Box has a UL94-HB rating. The NEMA 4X enclosure has a UL94-V2 flammability rating. The Euro Housing enclosure has a UL94-V0 flammability rating. CE exception: Averaging units and any other configuration with leads longer than 3 meters. The Plastic Box has a UL94-HB rating. The NEMA 4X enclosure has a UL94-V2 flammability rating. The Euro Housing enclosure has a UL94-V0 flammability rating.





# ACI SUBMITTAL SHEET

TEMPERATURE

TRANSMITTERS

## A/TTM1K-A-50'-GD

### Sensor Specifications

Supply Voltage	8.5 to 32 VDC 249 Ohm Load: +13.5 to 32 VDC 499 Ohm Load: +18.5 to 32 VDC
Supply Current	3mA - 25mA
Input	2-wire Platinum 1K Ohm Class A RTD
Output	2-wire, Linear 4 to 20 mA DC Current (standard), 1 to 5 VDC, or 2 to 10 VDC
Accuracy	+/-0.2% of full scale for spans 500°F (275°C)
Temperature Effect	+/-0.02% of full scale for spans >100°F (55°C) +/-0.04% of full scale for spans < 100°F (55°C)
Operating Temperature	-40 to 185°F (-40 to 85°C)
Operating Humidity	0-90% RH non-condensing
Minimum & Maximum Span	minimum: 50°F (28°C)/maximum: 1000°F (550°C)

This sensor is covered by ACI's 5 year limited warranty

**Configuration:** Copper Averaging

Copper Averaging with sensors configured in Series/Parallel in a flexible copper tube

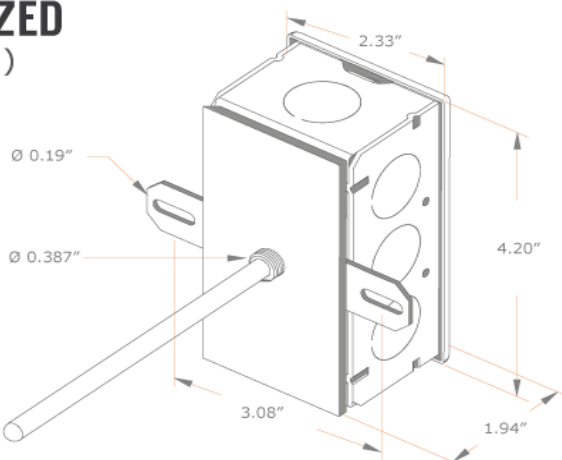
### Wire Specifications

Wire Rating	MIL-W-16878/4 Type E
Wire Description	22 AWG Etched Teflon
Wire Temperature Range	-67 to 392°F ( -55°C to 200°C)

### Enclosure Specifications

Enclosure Temperature Range	See material type.
Enclosure Material	Zinc Plated Steel

**GALVANIZED**  
(Averaging)



Made in the USA



ISO9001 Certified



Created on:06/16/2017

\*Specifications are subject to change without notice.