ACI
Automation Components, Inc.

Product Data

A/TT100 Series
A/TT1K Series
A/TTM100 Series
A/TTM1K Series

Temperature Transmitters

Transmitter

TEMPERATURE

RELATIVE HUMIDITY

PRESSURE

CURRENT

GAS SENSORS

ACCESSORIES

INTERFACE DEVICES

Product Description

ACI temperature transmitters are a cost effective solution for all of your temperature measurement needs. The transmitters are accurate, durable, and reliable. In addition, numerous mounting configurations are offered.

ACI produces two temperature transmitters, the A/TT100 for use with a 100 Ohm Platinum RTD and the A/TT1K for use with a 1K Ohm Platinum RTD. The transmitters produce a linear 4-20 mA output carried on a two-wire system. Optional output voltage ranges of (+1-5 or +2-10 VDC) can also be ordered. The transmitter is supplied factory calibrated, and supplied with zero and span potentiometers for field calibration.

To enhance overall performance, the A/TTM Series offers a matched calibration of the sensor and transmitter which improves the measurement accuracy by elimating the sensor tolerance error. A N.I.S.T. certificate is provided on all A/TTM Series sensors.

These products are covered by ACI's Five (5) Year Limited Warranty, which is located in the front of ACI'S SENSORS & TRANSMITTERS CATALOG or can be found on ACI's web site, which is: www.workaci.com.

Attributes:
- **Reverse Polarity Protected**
- **Class A RTD included**
- **Custom calibration ranges are available**

Applications:
- **Data acquisition**
- **OEM**
- **Process Control**
- **Clean Rooms**

Product Specifications

Transmitter Supply Voltage	8.5 to 32 VDC 249 Ohm Load: +13.5 to 32 VDC 499 Ohm Load: +18.5 to 32 VDC
Temp. Transmitter Input	2-wire Platinum 100/1K Ohm Class A RTD
Temp. Transmitter Output	2-wire, Linear 4 to 20mA DC Current (Std.) 1 to 5 VDC or 2 to 10VDC
Calibrated Accuracy (linearity, hysteresis, and repeatability)	+/- 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 to 90% RH non-condensing
Minimum and Maximum Spans	50°F (28°C) min / 1000°F (550°C) max

Made in the USA

Automation Components, Inc.
2305 Pleasant View Rd.
Middleton, WI 53562
PH: (608) 831-2585
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Wiring Diagrams available at www.workaci.com

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Ordering Information

A/TT100 (100 Ohm RTD)   **A/TTM100** (100 Ohm RTD)
A/TT1K (1000 Ohm RTD)   **A/TTM1K** (1000 Ohm RTD)
                                   Matched Calibration with 3 point NIST certificate

For added accuracy 5 point calibration is also available **A/5PT NIST** (5 Point NIST Calibration certificate)

-Span	-Configuration		-Length	-Output	-Enclosure Type
↑	↑		↑	↑	↑
(1) 40 to 90°F	**D**	(Duct)	**4", 8", 12", 18"**	**(1)** 1 to 5VDC	**PB, GD, BB, 4X, EH**
(2) 30 to 100°F	**I**	(Immersion w/ well)	**2.5", 4", 6"**	**(2)** 2 to 10VDC	**PB*, GD, BB, 4X, EH**
(3) 20 to 120°F	**INW**	(Immersion no well)	**2.5", 4", 6"**	**(4)** 4 to 20mA	**PB*, GD, BB, 4X, EH**
(4) 40 to 140°F	**A**	(Copper Averaging)	**8', 12', 24'**		**PB, GD, BB, 4X, EH**
(5) 40 to 240°F			**50', 80', 100'**		**PB, GD, BB, 4X, EH**
(6) -30 to 130°F	**RA**	(Rigid Averaging)	**18", 24", 36"**		
(7) 0 to 150°F	**S**	(Strap)	- - - - - - -		**PB*, GD, 4X**
(8) Specify	**O**	(Outdoor Air)	- - - - - - -		**EH, BB, 4X**
	W-6'	(Raw w/ 6' Leads)			**PB, GD, BB, 4X, EH**
	SP	(Stainless Plate)			

Enclosure Key

PB = Plastic Box
GD = Galvanized Box
BB = NEMA 3R
4X = NEMA 4X
EH = Euro Housing (Weather tight)

Example: A/TT1K-3-D-4"-4-PB

*Please note that the -**PB** (Plastic Box) is rated to 140°F and may not be suitable for high temperature applications.
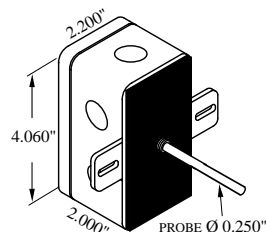
Room configurations:

-Span	Configuration		-Output
↑	↑		↑
(1) 40 to 90°F	**R2**	(Room)	**(1)** 1 to 5VDC
(2) 30 to 100°F	**R2S***	(Room w/ Setpoint)	**(2)** 2 to 10VDC
(3) 20 to 120°F	**R2O**	(Room w/ Override)	**(4)** 4 to 20mA
(4) 40 to 140°F	**R2SO***	(Room w/ Setpoint & Override)	
(5) 40 to 240°F			
(6) -30 to 130°F			
(7) 0 to 150°F			
(8) Specify			

Room Sensors with* require setpoint specs (value, indication, and action) and are not listed on your packing slip or invoice.
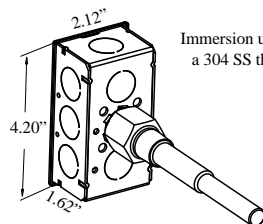
R2= New Aries Enclosure **OR R=** Previous Infinity Enclosure (Please contact ACI for display options)
Example: A/TT100-1-R2-4-DF
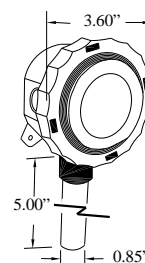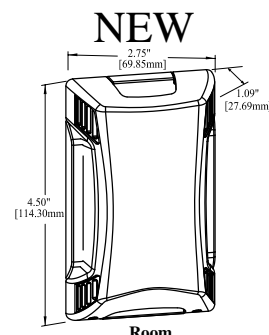
Standard enclosure defaults: NEW

Immersion units include a 304 SS thermowell

2.200"
4.060"
2.000"
PROBE Ø 0.250"
Duct
(Plastic Box)

2.12"
4.20"
1.62"
Immersion
(Galvanized Box)

3.60"
5.00"
0.85"
Outdoor Air
(Euro Enclosure)

2.75" [69.85mm]
1.09" [27.69mm]
4.50" [114.30mm]
Room

2305 Pleasant View Road   Middleton, WI 53562
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