TEMPERATURE | TRANSMITTERS | HAZARDOUS





HAZARDOUS

Room, Duct & Immersion Transmitters

The ACI Hazardous Transmitter Series features an encapsulated temperature transmitter mounted in an industrial connection head style enclosure. The epoxy coating provides excellent protection of the transmitter from moisture and corrosion when used in harsh environments and improved accuracy due to the thermal conductivity of the epoxy keeping the components at a more stable operating temperature. The sensors are manufactured using ACI's double encapsulation process to eliminate the effects of moisture upon the sensors and to increase response times. For higher accuracies, ACI recommends the use of the A/TTM Series transmitters which includes a secondary calibration process that removes most of the sensor error over the calibrated temperature span of your transmitter and includes a 3 or 5 Point NIST Certificate. The unit includes an O-Ring seal, ground screw, and weather resistant finish. The

"INW" Immersion sensor without thermowell can be used with an existing thermowell or paired with one of our machined thermowells when higher flow rates, temperatures, pressure rating or corrosion resistance is required. This product should be installed by a trained professional with knowledge of local codes and regulations.

Applications: Hazardous Atmospheres, Industrial Sensor Applications, Process Control, Exhaust Systems

The ACI Hazardous 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 website, www.workaci.com.

Transmitter Supply Voltage Supply Current:	+8.5 to 32 VDC (Reverse Polarity Protected) 25 mA minimum
Transmitter Supply Voltage Supply Current:	250 Ohm Load (1-5 VDC): +13.5 to 32 VDC 500 Ohm Load (2-10 VDC): +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:	Temp. Spans < 500°F (260°C): +/- 0.2% Temp. Spans > 500°F (260°C): +/- 0.5%
Temperature Drift:	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: 20%, 35%, 50%, 65%, 80% of span
Protection Level:	Thermally Conductive, Low Moisture, Corrosion Resistant Epoxy / Plastic Cup
Warm Up Time Warm Up Drift:	10 Minutes +/- 0.1%
Operating Storage Temperature Range:	-40°F to 185°F (-40 to 85°C)
Operating Storage Temperature Range.	0 to 95%, non-condensing
Calibrated Temperature Spans¹:	Minimum Temp. Span: 50°F (28°C) Maximum Temp. Span: 500°F (260°C)
Connections:	22 AWG (0.654 mm) Colored Leads; Polarity Sensitive 22 to 15 AWG Wire Nuts
Sensor Type Sensor Curve Sensing Points:	Platinum RTD PTC (Positive Temperature Coefficient) One
Number Sensor Wires Wire Colors:	Two A/TT100/TTM100-EXPL: Brown/Brown A/TT1K/TTM1K-EXPL: (Black/Black)
Nominal Sensor Output @ 0°C (32°F):	A/TT100/TTM100-EXPL: 100 Ohms A/TT1K/TTM1K-EXPL: 1000 Ohms
Sensor Tolerance Class Accuracy:	+/- 0.06% Class A (Tolerance Formula: +/- °C = (0.15°C + (0.002 * t))
Selisor Tolerance Class 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 (572°F)
Response Time (63% Step Change):	8 Seconds nominal
Lead Length Conductor Size:	14" (35.6 cm) or 24" (61 cm) 22 AWG (0.65mm)
Lead Wire Insulation Wire Rating:	Etched Teflon (PTFE) Colored Leads Mil Spec 16878/4 Type E)
Conductor Material:	Silver Plated Copper
Enclosure Specifications (Material, Operating	"-D" Enclosure: Feraloy® Iron Alloy, -50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG
Temperature, NEMA Ratings):	"-I or -INW" Enclosure: Feraloy® Iron Alloy, -50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG
remperature, NEMA Ratings).	"-R" Enclosure: Peraloy IIOTI Alloy, "50 to 60°C (-58 to 140°F), NEMA 3, 4, 7ABCD, 9EFG
Enclosure Explosion Proof Rating:	CL. I, Div. 1 & 2, Groups A, B, C, D
Enclosure Explosion Proof Rating: Enclosure Dust-Ignition Proof Rating:	
Enclosure Pust-ignition Proof Rating: Enclosure Raintight Wet Locations Ratings:	CL. II, Div. 1, Groups E. C. J. Cl. III
Enclosure VL CSA Standards:	CL. II, Div. 2, Groups F, G CL. III
·	UL 1203 CSA C22.2 No. 30 :-40 to 200°C (-40 to 392°F) -40 to 85°C (-40 to 185°F)
Operating Storage Temperature Ranges	
Enclosure Hubs Hub Size:	0 to 95% RH, non-condensing
Enclosure Hubs Hub Size: Probe Material Diameter Sensor Threads:	Two 1/2" NPT Female Hubs
Thermowell Material Bore Diameter:	304 Stainless Steel 0.250" (6.35mm) nominal ½" NPT Threads
········	304 Stainless Steel 0.260" nominal
Product Dimensions Product Weight:	5. ½" NPS (National Pipe Straight) Female Thread ½" NPT (National Pipe Tapered) Male Thread
	See back of Product Data sheet Room: 1.9 lbs, Duct: 4.5 lbs, Immersion: 4.85 lbs
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



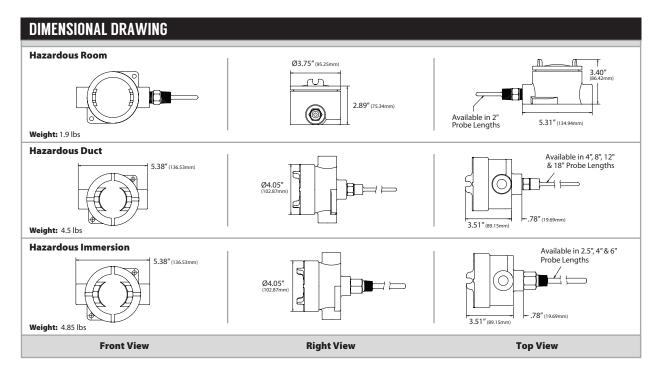






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HAZARDOUS ROOM ORDERING Model # Example: A/ TT100 R 2 EXPL EXPL			
A. Sensor Series No Selection Required	A/	A/	
B. Model Series Select One (1)	TT100 = 100Ω TTM100 = Matched $100\Omega^*$ TT1K = $1K\Omega$ TTM1K = Matched $1K\Omega^*$		
D. Configuration No Selection Required	R = Room with 2" Stainless Steel Sensing Tube		
F. Analog Output Select One (1)	1 = 1 to 5 VDC 2 = 2 to 10 VDC 4 = 4 to 20 mA		
E. Sensor Model No Selection Required	EXPL = Hazardous Sensor		
F. Calibrated Span Specify Span in °F or °C (Best Accuracy in 100°F Increments)			

Note*: For TTM100 or TTM1k part numbers, the default NIST is 3 points | 5 points may be requested by adding the part number listed below (NIST TTM CERT - 5PT.) There is a surcharge of \$25 to upgrade to 5 point calibration

HAZARDOUS DUCT ORDERING Model # Example: A. D. C. D. E. F. G.		
A. Sensor Series No Selection Required	A/	A/
B. Model Series Select One (1)	TT100 = 100Ω TTM100 = Matched $100\Omega^*$ TT1K = $1K\Omega$ TTM1K = Matched $1K\Omega^*$	
C. Configuration No Selection Required	D = Duct	D
D. Duct Probe Length Select One (1)	4" = Duct 4" 8" = Duct 8" 12" = Duct 12" 18" = Duct 18"	
E. Analog Output Select One (1)	1 = 1 to 5 VDC 2 = 2 to 10 VDC 4 = 4 to 20 mA	
F. Sensor Model No Selection Required	EXPL = Hazardous Sensor —	EXPL
. Calibrated Span Specify Span in °F or °C (Best Accuracy in 100°F Increments)		

Note*: For TTM100 or TTM1k part numbers, the default NIST is 3 points | 5 points may be requested by adding the part number listed below (NIST TTM CERT - 5PT.) There is a surcharge of \$25 to upgrade to 5 point calibration



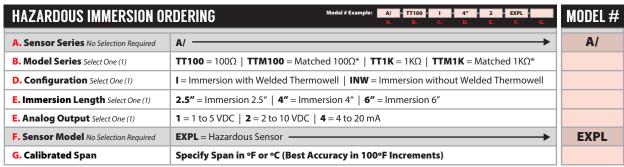




Automation Components, Inc.

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ACCESSORIES ORDERING Model # Example: NISTITM CERT-SPTOR- 129743				
Model #	Item#	Description		
NIST TTM CERT-5PT.	129743	5 Point Calibration & Certificate		





