

Nickel Temperature Sensors



ACI/1K-Nickel



Product Description

The ACI/1K-Nickel Series temperature sensors incorporate a thin film RTD sensor, which provides a predictable output over a specified temperature range of -50 to 275°F.

These sensors are available in a two-wire configuration incorporating high accuracy and interchangeability throughout a wide temperature range.

These units are offered in Room, Room with Set Point, Room with Override, Room with Setpoint and Override, and Room with Setpoint, Override, and RJ11 Jack; Stainless Steel Duct and Duct without Box, Immersion, Stainless Plate, Raw, Strap-On, Bullet Probe, Bendable Copper Averaging, Button sensors, and Outdoor Air Configurations.

Setpoint options include a linear 400 Ohm, 1K, 2K, 3K, 5K, 8.5K, 10K, 20K, or 100K ohm slide potentiometer. An optional series resistor allows for any offset of the setpoint potentiometer. The slide pot action may be either Direct or Reverse Acting.

Indication stickers for the setpoint include Cool|Warm, 55 to 85, and 10 to 30°C. Others are available upon request.

Override options include a N/O switch in parallel with the sensor or a separate 2 pole terminal block for Tenant override.

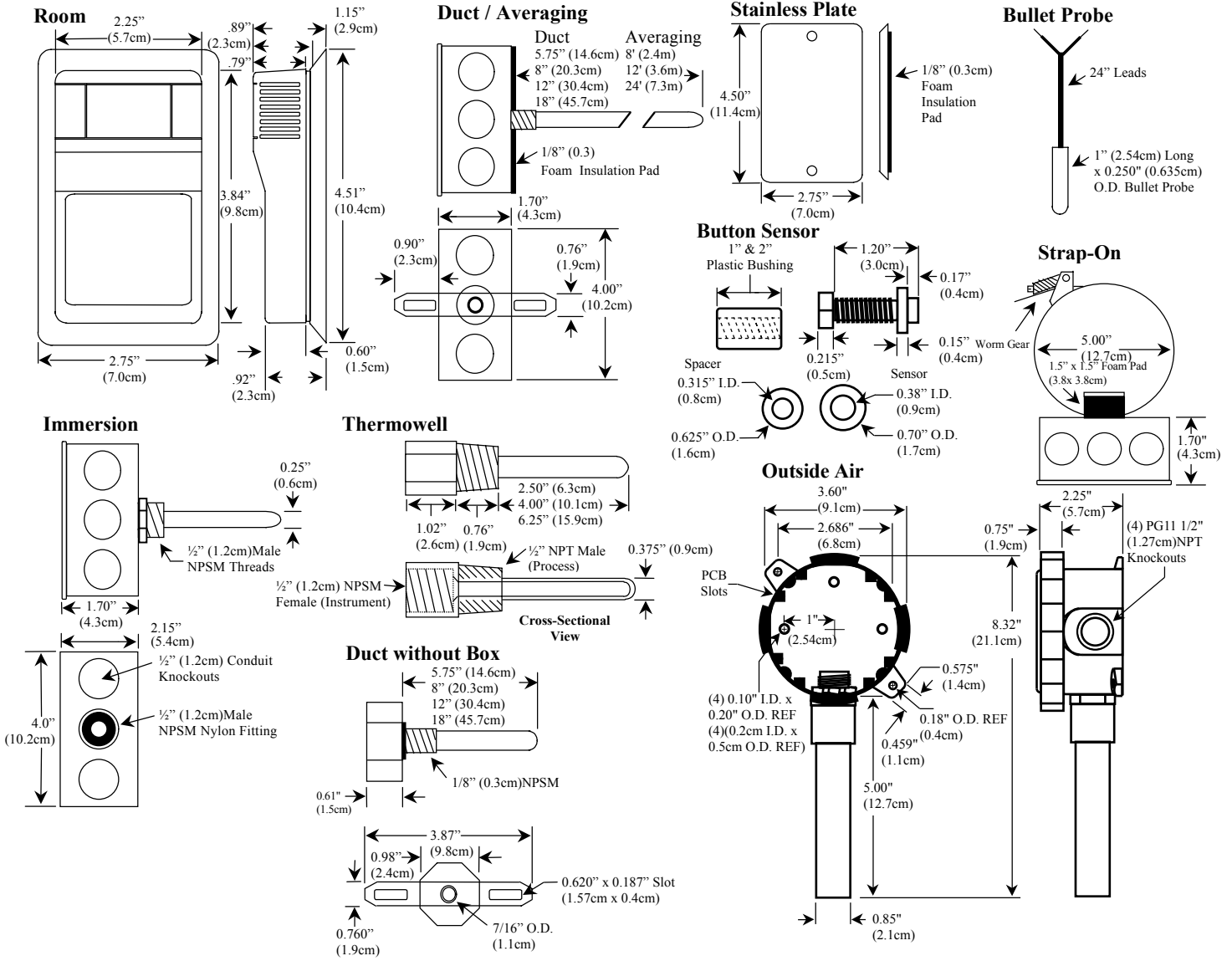
All ACI sensors can be ordered with optional 4 pin RJ11 or 6 pin RJ12 communication jacks with terminal blocks for remote programming.

All units come with a two year factory warranty. Please contact ACI for more information regarding any of these products.

Product Specifications

Output	1000 Ohms @ 70°F (21°C)	Accuracy:	<u>Temp</u>	<u>Resistance</u>	<u>Accuracy</u>
Temp. Coefficient	0.00527 Ohm/Ohm/°C		-50°F	674 Ohms	+/- 1.4°F
Temperature Operating Range	-50 to 275°F (-45.5 to 135°C)		-30°F	725 Ohms	+/- 1.2°F
			32°F	892 Ohms	+/- 0.5°F
Repeatability	+/- 0.2°F		70°F	1000 Ohms	+/- 0.4°F
Drift	Less than 0.2°F / Year		170°F	1314 Ohms	+/- 1.3°F
		250°F	1597 Ohms	+/- 1.7°F	

Dimensions



Ordering Information

Sensor	Configuration	Communication Jack	Pot Value	Setpoint Indication	Pot Action
A/	-	-	-	-	-
↑	↑	↑	↑	↑	↑
1K-NI	R - Room RS - Room w/Setpoint RO - Room w/Override RSO - Room w/Setpoint & Override D - Duct 4", 8", 12", 18" DO - Duct without Box 4", 8", 12", 18" I - Immersion 2.5", 4", 8" S - Strap - On O - Outdoor Air BP - 1" Bullet Probe RP - Remote Probe 6' Lead Length SP - Stainless Plate W - Raw w/18" Leads BBS - Brass Button Sensor SBS - Stainless Button Sensor	RJ4 (4 Pin RJ11) RJ6 (6 Pin RJ12) 232 (1/8" Stereo Jack)	400 Ohm 1K 2K 3K 5K 8.5K 10K 20K 100K	Cool Warm 55 to 85 10 to 30°C Specify	DA (Direct) RA (Reverse)



For CE compliance, sensor leads must be no longer than 3 meters in length. Additionally, certain product variations may not be CE compliant. Contact ACI for further details

Example: A/1K-NI-RSO-RJ6-20K-55 to 85 -DA or A/1K-NI-I-4"