



TEMPERATURE SENSORS

Serving OEMs, Distributors, and Contractors with Application Solutions for: Rooftop Units, Air Handlers, Discharge Air, Supply Air, Return Air, Mixed Air, Chilled or Hot Water Systems, Boilers, Pumps, Compressors, Chillers, Room Temperature, Schools, Commercial Buildings, Data Centers, Hospitals, and Refrigerators/Freezers.

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Automation Components, Inc.

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Applications:

- Rooftop Units
- Air Handlers
- Discharge Air
- Supply Air
- Mixed Air
- Chilled or Hot Water Systems
- Boilers
- Pumps
- Compressors
- Chillers
- Room Temperature
- Schools
- Commercial Buildings
- Data Centers
- Hospitals
- Refrigerators/Freezers

TEMPERATURE

Accurate temperature measurement is the foundation of any building control system. ACI manufactures temperature sensors, including thermistors, RTDs, and transmitters to fit every application and meet the most demanding specifications. Most sensors are double-encapsulated to ensure durability. ACI has the manufacturing flexibility to provide unique solutions for all volume needs.



ROOM

ACI room sensors are designed for proper airflow which eliminates self-heating. Two housing styles are available each with all configuration options: setpoint, override, and/or communication jack. Custom branding is also available.



DUCT

Duct sensors are available with multiple enclosure options from the easy-to-install plastic box to a NEMA 4X box. Probe lengths range from 1" to 48" and are double-encapsulated for moisture resistance. Flange-style sensors without an enclosure are available with numerous wire options.



OUTSIDE AIR

Outside air sensors have multiple weathertight enclosure options that are mounted flat on an exterior or interior wall. A sun shield is available for applications in direct sunlight.



IMMERSION

Immersion sensors come with a 1/2" NPSM fitting to seamlessly connect to the standard 2.5", 4", and 6" 304 SS thermowell. Additional well lengths and materials are available.



STRAP-ON

ACI strap-on sensors are an accurate and nonintrusive method to measure pipe temperature. An insulated copper plate allows for thermal conductivity from inside the pipe. Standard straps will fit 2"-5" pipe diameter, and longer hose clamps are available.





COPPER AVERAGING

Bendable copper tubes are available in lengths up to 50' for thermistors and 100' for RTDs and transmitters. The copper element has an antimicrobial effect in the duct, and copper has significantly better thermal conductivity than aluminum.



RIGID AVERAGING

Similar to duct sensors, rigid averaging sensors use a rigid stainless steel probe to average the temperature across the length of the probe. Available in lengths from 12" to 48" and with multiple enclosure options.



FLEXIBLE AVERAGING

Using a plenum-rated wire element, flexible averaging sensors can be bent into tighter radii than copper making installation faster and easier. The multipoint sensor locations are visible to ensure placement in the airstream allowing for accurate measurement.



BUTTON

Button sensors are a small and discreet way to measure room temperature. Available in stainless steel, brass, or plastic options; each option can be painted to blend in with the room's décor.



BULLET PROBE

Limitless options for bullet probes, including wire length, wire type, fittings, connectors, and probe length ensure a solution for every application.



TUC2

The TUC2 series indicates temperature, setpoint, fan speed, and occupancy status in a sleek, backlit display with numerous user-configurable options.





STAINLESS PLATE

The sensing element is epoxied to the back of the stainless plate and covered with an insulated pad thermally shielding it from temperatures inside the wall. Ideal for high-traffic areas. Available options include an override button, RS232 jack, and custom branding.



HIGH & LOW TEMPERATURE

High (HT) and low (LT) temperature sensors are air-encapsulated providing reliability in extreme conditions. Available in duct, immersion, and outside air configurations and can operate in temperatures from -324 °F to +743 °F depending on the device.



FREEZER SENSOR

ACI freezer sensors are designed to be used with a thermal buffer for accurate temperature readings in low temperature and cryogenic applications. Available with NIST certificates and in numerous lengths, outputs, and enclosure options.



THERMAL BUFFERS

Thermal buffers are used to prevent false alarms caused by the freezer doors opening. ACI offers numerous bottle sizes, buffer media, and mounting options.



HAZARDOUS

Hazardous sensors feature an explosion-proof enclosure including a gasket, ground screw, and two ½" NPT female openings. The enclosure meets the following standards: UL 886; CL. I, DIV. 1 & 2, GR. A, B, C, D; CL. II, DIV. 1, GR. E, F, G; CL. II, DIV. 2, GR. F, G; CL. III; NEMA 3, 4, 7ABCD, 9EFG.





LOOP POWERED DISPLAY [4-20MA]

The A/LCD-R-4-20MA is a low-power, high-accuracy LCD display available in our Infinity enclosure. It can be used to display the output from any 4–20 mA device, such as temperature or humidity sensors. It can be calibrated to display any value between -1999 to 1999, with C and/or F, and decimal point descriptors.



MOUNTING PLATES

Mounting plates are used to cover large openings or to install a vertical sensor over a horizontal box. Multiple colors, sizes, and options are available.



LOCKING COVER

The LOCKING COVER can be used to protect a room-mounted enclosure from physical damage or tampering. The LOCKING COVER includes a clear vented cover and two keys.



DUCT WITHOUT BOX

ACI duct sensors are available without a housing but with a mounting flange for easy installation in VAV applications. Numerous wire types, lengths, and connectors are available.



PIPE MOUNT

This sensor features a 1.1" crescent-shaped brass probe designed to improve the thermal conductivity between the pipe and the sensor. The probe also has a notch to hold wire tiles firmly in place.



THERMOWELLS

ACI offers fabricated and machined thermowells in lengths from 1.25" to 24". Standard wells are 304 SS, with 316 SS available in the most common lengths.





NEMA 4X

The NEMA 4X housing is intended for indoor and outdoor use to provide a degree of protection against corrosion, dust, rain, splashing water, hose-directed water, and the formation of ice on the enclosure. Signified by -4X in ACI part numbers. Available configurations: duct, immersion, averaging (copper, flexible, and rigid), outside air, and strap-on.



INFINITY [WITH LCD OPTION]

The Infinity (R) enclosure has four-way airflow and is ACI's oldest room sensor housing. It can support numerous options such as LCD, setpoint, override, and communication jacks. It is available in beige (default), white, or black and with custom branding.



ARIES

The Aries enclosure (R2) is ACI's newest room sensor enclosure. Designed to fit over a standard 2" x 4" junction box, the Aries enclosure features a sleek, modern design. It is available in white and with all the standard room sensor options (setpoint, override, and communication jack) and with custom branding.



NEMA 3R

The NEMA 3R or "Bell Box" is a plenum-rated housing intended for outdoor use primarily to provide a degree of protection against falling rain and the formation of ice on the enclosure. Signified by -BB in ACI part numbers. Available configurations: duct, immersion, averaging (copper, flexible, and rigid), and outside air.



GALVANIZED

The galvanized housing is plenum-rated and intended for indoor use to provide protection against contact with the enclosed equipment and wiring. Signified by -GD in ACI part numbers. Available configurations: duct, immersion, averaging (copper, flexible, and rigid), outside air, and strap-on. Default housing for immersion and strap-on sensors.





EURO

The euro housing is a weatherproof housing ideal for outside air applications. It includes a tool-less gasketed cover and multiple knockouts to fit conduit connections. Signified by *-EH* in ACI part numbers. Available configurations: outside air. Default housing for outside air sensors.



PLASTIC BOX

The innovative plastic box from ACI has a hinged cover with a snap latch for fast and easy access saving installation time. Unique to ACI, this plenum-rated, lightweight, robust housing has a built-in mounting flange. Signified by *-PB* in ACI part numbers. Available configurations: duct, immersion, averaging (copper, flexible, and rigid), outside air, and strap-on. Default housing for duct and averaging sensors.





WE HAVE YOU COVERED!



From engineering and design services to installation and troubleshooting, our Technical Support Team offers expert support for every customer and every application. Our Sales and Customer Support Teams can help with quotes, order status, invoicing, and many product spec and application questions.

CONTACT US

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