

# Temperature Transmitter

## What Is A Temperature Transmitter?

A Temperature Transmitter is a device that converts the signal produced by a temperature sensor into a standard instrumentation signal representing a process variable temperature being measured and controlled.

## What Is Temperature Transmitter How It Works?

Put simply, a Temperature Transmitter is an electrical instrument, which interfaces the temperature sensor to isolate, amplify, filter noise and convert the signal from the sensor to send it to the control device. It is a tool to help measure and alert temperature changes.

Allied Tools Corporation's ultra-miniature Temperature Transmitter converts mill volt input from thermocouples or resistance from RTD or potentiometer into 4 to 20 mA output. Featuring state-of-the-art integrated circuits and electronic design, these ultra-compact transmitters have a diameter of only 45mm and are designed to fit inside many compact thermo well protection heads.

Transmitters can eliminate long runs of costly field wiring in a variety of applications. A stable 4 to 20 mA output signal is produced proportional to the transmitter's specific input type and calibrated temperature range. Adjustability of zero and span is provided to facilitate some range ability. The transmitted signal eliminates noise pickup, voltage drops, and multiple cold junction errors, and it requires only a twisted pair of copper wires for loop connections. All models and ranges of these ultra-miniature transmitters are available with fully epoxy-potted electronics, which gives ultimate protection in extreme environments.



## Specifications:

- Item Code: TE500AD-Series
- Type: Temperature Transmitter
- Usage: Industrial

## Features:

- Based on state of art latest microcontroller technology with Watchdog feature for fail safe operation.
- Highly accurate, fast & reliable sensing technology.
- Fixed resolution of 0.1 for both Temperature & Relative humidity.
- Long term Stability for %RH is typically < 1% RH / year.

- Isolated RS485 Serial port with MODBUS RTU Protocol output for PC interface
- Two freely scalable & configurable analog output.
- Flame proof version is available on request for hazardous application.
- Excellent long term stability.
- Compact size, easy to install & flexible.
- Optional display / keypad.

#### Applications:

- Building automation, climate control rooms, computer server rooms, green houses.
- Agriculture application, meteorological application, weather station.
- Humidifiers & Dehumidifiers, electronic enclosure.
- Drying process in chemical application.
- Storage room monitoring, cold storage, clean rooms , warehouse.
- Pharmaceuticals, Medical application (health care, medicine storage).
- Calibration equipment's.
- Industrial process monitoring & controls & etc.

#### Reliable Measurement:

- Built in 1500VAC Galvanic Isolation
- Superior noise performance
- Sensor error detection in accordance with Namur 89

#### Lower Cost Of Ownership:

- Universal input
- Dual channel option saves panel space
- Easy to configure, install and commission
- Can double up as position and level transmitters for valves and ohmic level sensors.