

# Temperature & Humidity Sensor - THS00



## Temperature & Humidity Sensor

The AKCP single port dual Temperature & Humidity Sensors has both temperature and humidity measuring capabilities in a single sensor. This extends the capability of the sensorProbe to measure up to 8 temperature and 8 humidity sensing parameters, just by connecting 8 dual sensor.

Up to 2 dual sensors can be plugged into the RJ-45 jacks on the sensorProbe2 and up to 8 sensors on the sensorProbe8, sensorProbe8-X20/X60.

You can connect up to 8 on the securityProbe main unit and 8 more on each E-sensor8 expansion module. Specially designed CAT 5 cable assures a correct reading up to 100 feet, and is available in standard length of 1 foot, 15 feet, 60 feet and 100 feet, allowing the sensors to be positioned in hot spots. These dual sensors can be extended beyond their standard length.

In some cases they can be extended up to

1,000 feet (only the THS00 remote type should be extended).

When the dual sensor is plugged into the RJ-45 port, the sensorProbe will auto detect the sensor, and it will display Temperature & Humidity for each RJ-45 port. A built in graph option is included on all sensorProbes for graphing temperature and humidity variations over a period of time.

Each Temperature \ Humidity Sensor has its own SNMP OID so that the data can be collected over network and graphed using external application like MRTG. The Temperature \ Humidity Sensor can be read using included SNMP utilities to allow graphing and data logging at 0.2°C resolution. We also sell a Water resistant version of our Temperature \ Humidity Sensor Water resistant Product Code : THSW15



## Temperature & Humidity Sensor's Main Features

- Available in 1 foot, 15 feet, 60 feet and 100 feet sizes
- RJ-45 connection for easy and Simple installation
- Full autosense including disconnect alarm
- THS00 can be extended to your desired cable length using one of our CAT5 extension (we don't recommend extending the fixed one foot version) cables, CABXX, or you can provide your own cable of any length up to 1000 feet.
- Available in a fixed or custom length water resistant version.

## Calibration & Accuracy Information

Some industries require a certificate showing the temperature/humidity sensors are calibrated. The sensors have quite a high accuracy. The sensors are calibrated by the supplier. In general they do not need much calibration. However, you may find that there is a deviation of possibly  $\pm 1^{\circ}\text{C}$  for temperature and  $\pm 2\%/\pm 3\%$  for humidity on the sensorProbe unit.

In this case you can off-set the deviation through the systems web interface using the "Reading Offset" feature to adjust the reading by your offset amount. Please see the product manual for more information on the reading offset feature.

We also have the sensor calibration certificate from our sensor electronics supplier that we can provide you with. Just email support if you would like us to send you this document.

## Technical Specifications

### Temperature

**Never needs Calibration**

**Measurement range Celsius :** -40°C to +75°C

**Measurement resolution Celsius :** 1°C for the sensorProbe and 0.1°C for the securityProbe units.

**Measurement accuracy Celsius :** Maximum  $\pm 2.3$  at -40°C, minimum  $\pm 0.4$  at +25°C and  $\pm 1.7$  at +75°C

**Measurement range Fahrenheit :** -40°F to +167°F

**Measurement resolution Fahrenheit :** 1°F for the sensorProbe and 0.1°C for the securityProbe units.

**Measurement accuracy Fahrenheit :** Maximum  $\pm 4.1$  at -40°F, minimum  $\pm 0.9$  at +25°C and  $\pm 4$  at +167°F

**Communications Cable :** RJ45 jack to temperature sensor using UTP Cat 5 wire

**Sensor Type :** semiconductor microprocessor controlled

**Power Source :** powered by the sensorProbe. No additional power needed.

**Power Consumption :** Typical 10.70 mWatt, 2.14mA

sensorProbe autodetects the presence of the temperature sensor

**Measurement Rate :** one reading every second

Up to 2 temperature sensors per sensorProbe2, 8 per sensorProbe8.

You can connect up to 8 on the securityProbe main unit and 8 more on each E-sensor8 expansion module.

**OID temperature sensorProbeTempDegree =** 1.3.6.1.4.1.3854.1.2.2.1.16.1.3.X

**OID temperature sensorProbeTempStatus =** 1.3.6.1.4.1.3854.1.2.2.1.16.1.4.X

**OID humidity sensorProbeHumidityPercent =** 1.3.6.1.4.1.3854.1.2.2.1.17.1.3.X

**OID humidity sensorProbeHumidityStatus =** 1.3.6.1.4.1.3854.1.2.2.1.17.1.4.X

### Humidity

**Measurement range :** 0 to 100% Relative humidity

**Resolution :** 1% for the sensorProbes and 0.1% for the securityProbe units.

**Accuracy :** 25°C  $\pm 3\%$

**Communications Cable :** UTP Cat 5 cable

Powered by the sensorProbe. No additional power needed

**Power Consumption :** Typical 7.25 mWatt, 1.45mA

Sensor element wettable without damage

sensorProbe auto detects the presence of the dual sensor

Up to 2 dual sensors per sensorProbe2, 8 per sensorProbe8, securityProbe and E-sensor8 module