

**THS00** 

# **Combined Temperature & Humidity in a single sensor**

By using the dual Temperature & Humidity sensor you are able to extend the capabilities of your AKCP sensor monitoring base unit by combining two sensors on a single port.

#### Auto Sense

When the dual sensor is plugged into the RJ-45 port of the AKCP base unit, it will be automatically detected and configured to display the correct values.

## **SNMP** and Data Logging

Each Temperature and Humidity sensor has it's own SNMP OID so that data can be collected over a network.External applications like MRTG can be used to draw graphs, and SNMP utilities can log data at 0.2°C resolution. A built in graphing option is included on all base units for graphing temperature and humidity variations over a period of time.

#### Calibration

AKCP's Dual Temperature & Humidity sensor is factory calibrated and arrive ready to use. However, you may find that there is a deviation of possibly +/-1°C for temperature and +/- 2-3% for humidity. In this case you can off-set the deviation through the base units web itnerface using the "Reading Offset" feature. A calibration certificate can be provided upon request, please contact support@akcp.com.

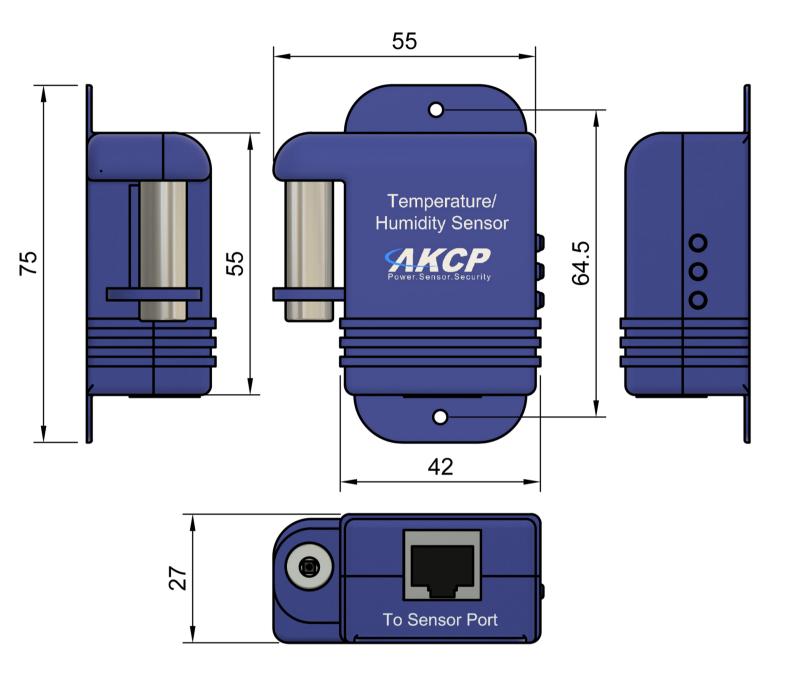
Conductive metal tube protects the sensor. Humidity sensor is exposed to air for accurate readings.

> Connect the sensor using CAT5 cable to your AKCP base unit. Use of good quality CAT5 will guarantee accurate readings with cable lengths up to 1,000 feet. Every THS00 ships with a free 5ft CAT5 cable.



THS00

Technical Drawing





# **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 -40oC, minimum $\pm 0.4$ at +25oC and $\pm 1.7$ at +75oC   |
| Measurement range Fahrenheit               | -40°F to +167°F   |
| <b>Measurement resolution Fahrenheit</b>   | 1°F for the sensorProbe and 0.1°C for the securityProbe units.  |
| Measurement accuracy Fahrenheit            | Maximum $\pm 4.1$ at -40oF, minimum $\pm 0.9$ at +25oC and $\pm 4$ at +167oF  |
| 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<br>sensorProbe2, 8 per sensorProbe8. You can connect up to 8 on<br>the securityProbe main unit and 8 more on each E-sensor8<br>expansion module. |
| OID temperature<br>sensorProbeTempDegree   | 1.3.6.1.4.1.3854.1.2.2.1.16.1.3.X   |
| OID temperature<br>sensorProbeTempStatus   | 1.3.6.1.4.1.3854.1.2.2.1.16.1.4.X   |
| OID humidity<br>sensorProbeHumidityPercent | 1.3.6.1.4.1.3854.1.2.2.1.17.1.3.X   |
| OID humidity<br>sensorProbeHumidityStatu   | 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 ±3%  |
| Communications Cable                       | UTP Cat 5 cable   |
| Power Source                               | powered by the sensorProbe. No additional power needed.   |
| Power Consumption                          | Typical 7.25 mWatt, 1.45mA  |

### About AKCP

AKCP established in the USA in 1981, created the market for networked temperature, environmental and power monitoring solutions. Today with over 100 employees and 130,000 installations, AKCP is the world's oldest and largest manufacturer of SNMP enabled networked sensors for the data center.