Temperature Sensors (TMP00-NIST2 / TMP01-NIST2)

If you're spending money for monitoring, wouldn't you want to know the sensors are calibrated?

2 NIST certified, calibrated temperature sensors are compared once a second for accuracy. (NIST2)

The NIST2 sensors feature a built in calibration check. Each unit has 2x NIST calibrated and certified temperature sensors. The primary sensor value is checked by the secondary sensor, and if we detect a range of greater than the stated accuracy we will alert that the sensor is out of calibration.

This makes these sensors ideal for situations where a high degree of accuracy is required and assurance of the calibration state

TMP00-NIST2
The sensor can be extended up to 50m (165ft) using standard CAT5 cable.

TMP01-NIST2
Fixed length sensor with 1ft cable.

NIST
National Institute of
Standards and Technology
U.S. Department of Commerce

Note:NIST3 sensors are compatible with sensorProbe+ and securityProbe series of base units only

Temperature Sensor

Calibration Check with Failover

3 NIST certified, calibrated temperature sensors are compared once a second for accuracy, with backup if pair is out of calibration (NIST3).

The NIST3 sensors feature a built in calibration check. 3 NIST calibrated sensors working in 3 pairs. The primary sensor value is checked by the secondary sensor, and if we detect a range of greater than the stated accuracy we will alert that the sensor is out of calibration. The sensor will then automatically fail-over and continue monitoring with a seamless graph of data.

Suitable for situations where a high accuracy, calibrated sensors are needed, with backup for critical monitoring applications.

TMP00-NIST3
Just like the TMP00, this sensor can be extended up to 50m (165ft) using standard CAT5 cable.

TMP01-NIST3
Fixed length sensor with 1ft cable

National Institute of
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U.S. Department of Commerce

Note:NIST3 sensors are compatible with sensorProbe+ and securityProbe series of base units only

Temperature Sensors (TMPWxx-xxmm)

TMPWxx

Waterproof temperature sensor* with extended metal tube. Available in a variety of cable lengths and in either the standard tube or a choice of two additional tube lengths, either 50mm or 100mm. Custom lengths can be ordered with code TMPWxx / TMPWxx-50mm / TMPWxx-100mm where xx is replaced by the cable length in feet.
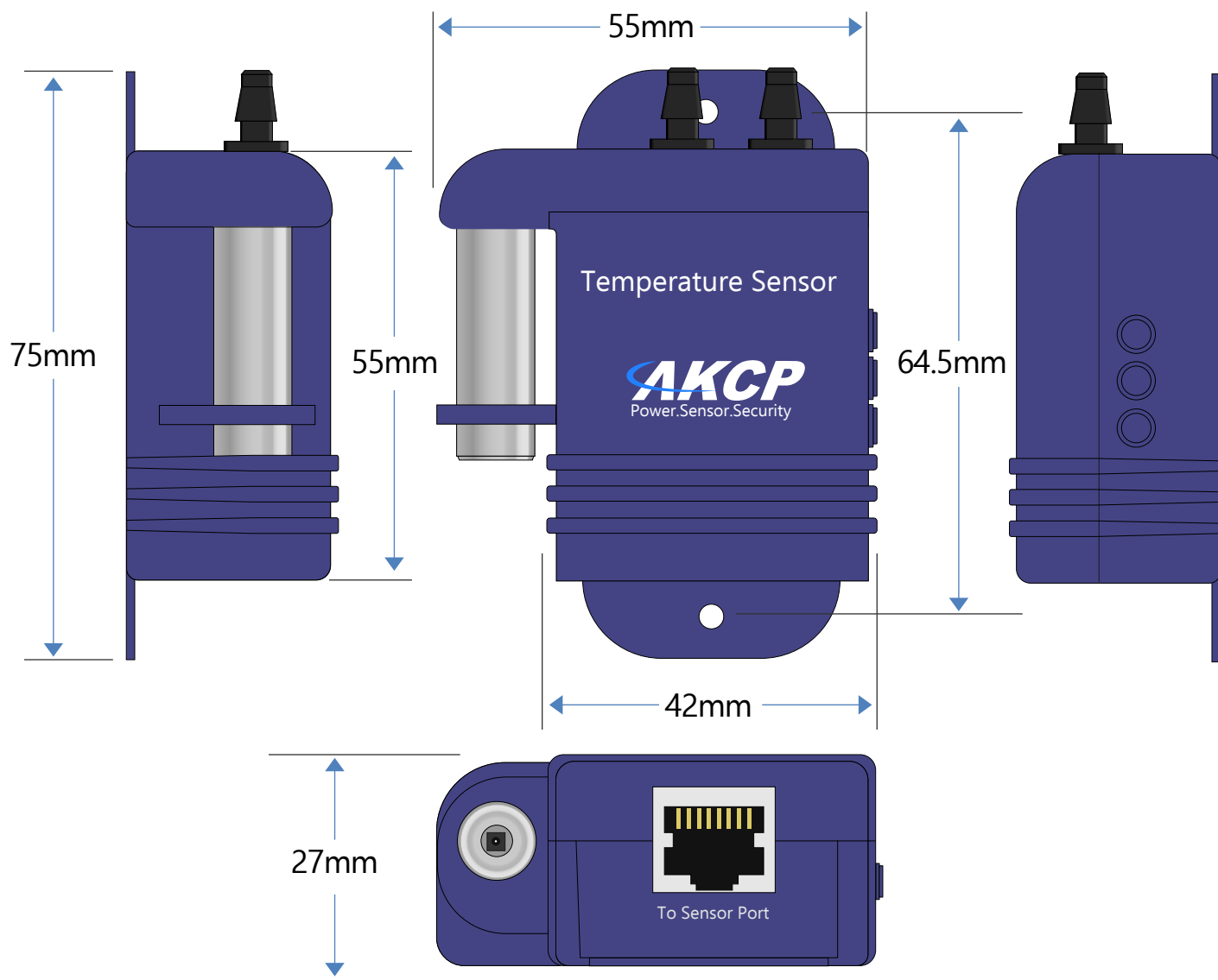

TMPW15-100mm

TMPW15-50mm

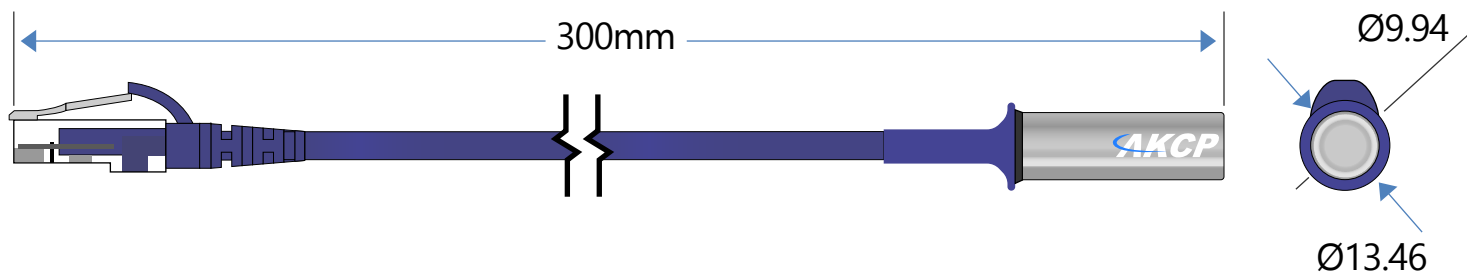*Water proof up to length of metal tube*

Temperature	
Measurement Range	-55°C to +75°C -67°F to +167°F
Measurement Resolution	securityProbe and sensorProbe+ series 0.1°C increments 0.2°F increments sensorProbe series 1ºC increments 1ºF increments
Measurement Accuracy	sensorProbe+ series and securityProbe series ±0.2°C accuracy from -10°C to +75°C ±0.5°F accuracy from +14°F to +167°F sensorProbe series ±1°C accuracy from -10°C to +75°C ±1°F accuracy from +14°F to +167°F
Calibiration	NIST traceable Calibration Certificate (TMPxx-NIST2 / 3) Built in calibration check, alerts when sensor needs re-calibration NIST3 with calibration check and failover
Interface	
Communications cable	RJ-45 jack to sensor using UTP CAT5e/6 cable
Power source	Powered by the base units. No additional power needed
Power Consumption	Typical 7.25mWatt, 1.45mA
Maximum Cable Length	TMP00-NIST2/3 - 165ft (50meters) with low capacitance shielded UTP cable TMP01-NIST2/3 - 165ft (50 meters)
Sensor Type	Semiconductor, microprocessor controlled
Dimensions	56 x 55 x 33.3 mm
Mounting	DIN rail mounting Screw mounting
Sensor count (TMPxx)	1
Sensor count (TMPxx-NIST2 / 4)	3
Important Note	The fixed one foot type or TMP01 are not designed to be extended. If you need to extend these sensors then you need to use the TMP00 (remote type). We also do not recommend you trying to connect any of our AKCP sensors including the temperature and dual temp humidity sensors though patch panels or using the RJ-45 couplers to extend them. Please see the temperature sensors product manual or FAQ in our knowledge base for more details regarding this.
Compatibility	NIST2 compatible with sensorProbe+ series and securityProbe / NIST3 sensorProbe+ only

Temperature Sensor

TMP00 - Extendable Temperature Sensor

Temperature Sensor

AKCP
Power.Sensor.Security

55mm

75mm

55mm

64.5mm

42mm

27mm

To Sensor Port

TMP01 - 1ft Temperature Sensor

300mm

Ø9.94

Ø13.46

Temperature Sensor

TMPW15 - Technical Drawing

TMPW15-50mm- Waterproof Temperature Sensor with 50mm tube

Ø6mm
50mm
4572mm

Ø6mm
4672mm
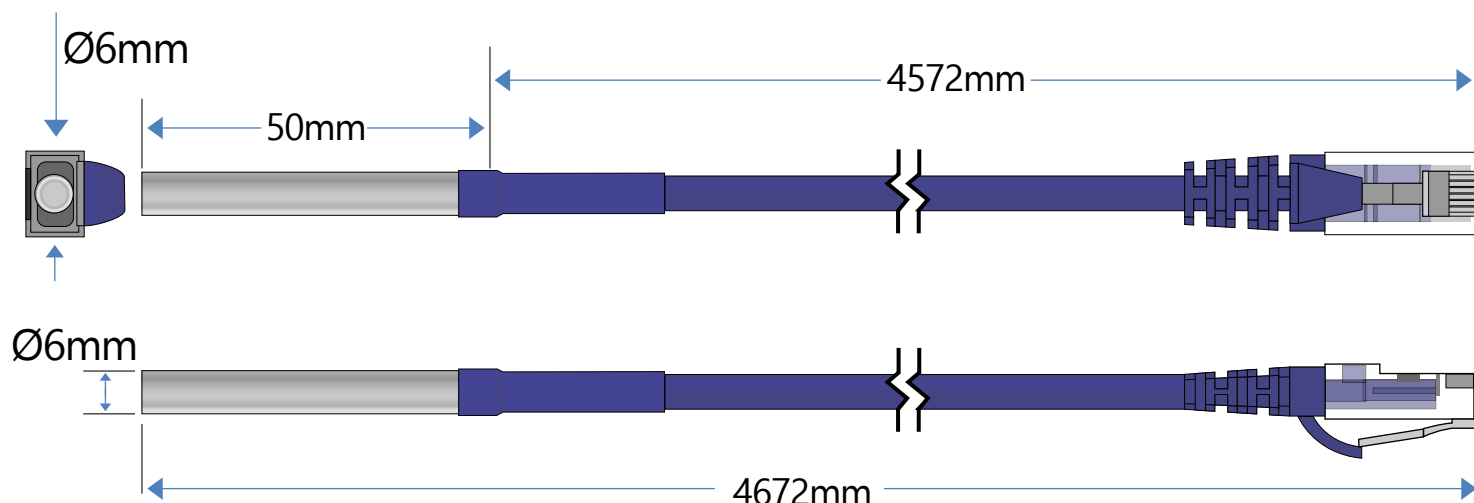
TMPW15-100mm- Waterproof Temperature Sensor with 100mm tube

Ø6mm
100mm
4572mm

Ø6mm
4672mm