

Accuracy vs Resolution

There is often confusion over the difference between the accuracy of monitoring devices, and the resolution of monitoring devices.

'Accuracy' refers to the range of uncertainty that applies to a given temperature measurement, i.e. the temperature value logged by the device as compared to the true temperature. The accuracy of the Temprecord logger is around 0.6°C (1.0°F) over the measurement range.

'Resolution' refers to the number of decimal places to which the temperature values are recorded, and also displayed. The resolution of the logger varies with temperature, but at 0C it is around 0.01°C (1 one-hundredth of a degree). The displayed resolution in Temprecord is usually 0.01°C. While it may not seem sensible to record and display the temperature values to a greater resolution than the accuracy of the logger, it can be in fact quite useful. Temprecord is able to record and display very small fluctuations in temperature - changes that would be much smaller than the resolution of other loggers, which often have a resolution of as much as 2.0°C.

The humidity values are normally displayed to a resolution to 0.01 %RH. The accuracy of the humidity measurements is dependent on the grade of logger. Please see the specification sheet for more details.



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