



## HAXO-8 Temperature & Humidity Recorder

- Record high resolution Temperature & Humidity readings simultaneously.
- A real time clock provides date/time stamps for each temperature reading.
- Push-to-start button with optional delay or a specific time & date.
- Comprehensive customisation options including alert settings, sample interval and trip duration.
- Robust and durable polycarbonate case with lug for secure mounting.
- Up to 8,000 recordings - enough for the longest trip.
- In-transit inspections can be recorded at the push of a button.
- Replaceable air filter.

The LogTag® HAXO-8 Humidity & Temperature Recorder measures and stores up to 8000 sets of high resolution humidity and temperature readings over a measurement range of 0 to 100%RH & -40°C to +85°C (-40°F to +185°F).

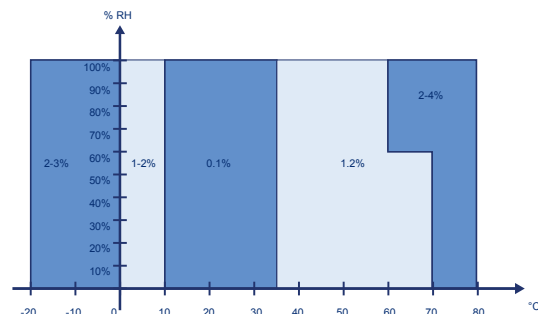
Enclosed in a robust and durable polycarbonate case - the HAXO-8 is equipped with a unique external temperature sensor arrangement providing fast reaction time to temperature change and a real time clock which provides date/time stamps for each temperature reading.

Using the LogTag Interface and LogTag's freely available companion software LogTag Analyzer, the LogTag is easily set-up for recording conditions including delayed start, sampling interval, number of readings, continuous or fixed number of readings and configuration of conditions to activate the ALERT indicator.

Readings are downloaded using LogTag Analyzer which provides facilities for charting, zooming, listing data statistics and allows exporting the data to other applications such as Excel.

The LogTag® HAXO-8 complies with the relevant international standards for temperature monitoring devices:- FCC, CE, C-TICK and RoHS. This demonstrates the quality and suitability of the LogTag® HAXO-8 for temperature monitoring applications where accuracy and consistency is required.

### Additional RH uncertainty for temperatures different than 25°C



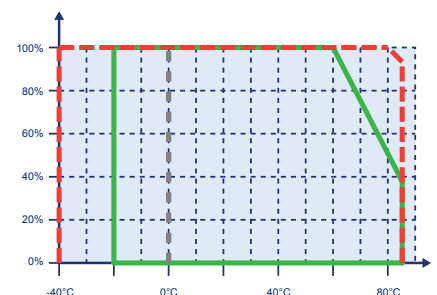
This graph shows the possible additional uncertainty in %RH compared to the accuracy specifications for temperatures different than 25°C for the standard factory calibration. The shown uncertainties may be positive or negative.

The performance can be improved by re-calibrating the product for %RH at the specific temperature of interest after which case this chart would no longer apply.

### Humidity Measurement Operating and Storage Conditions

This chart shows the normal recommended operating range of the humidity sensor. Conditions outside the recommended range may temporarily offset the RH signal up to  $\pm 3$  %RH.

After return to normal conditions it will slowly return towards calibration state by itself. See "Reconditioning Procedure" to accelerate this process. Prolonged exposure to extreme conditions may accelerate ageing.



### Accessories

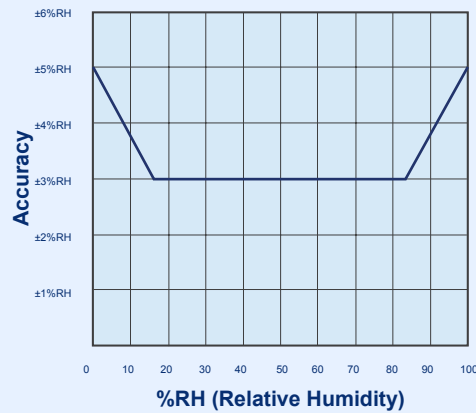


Wall Mount Bracket

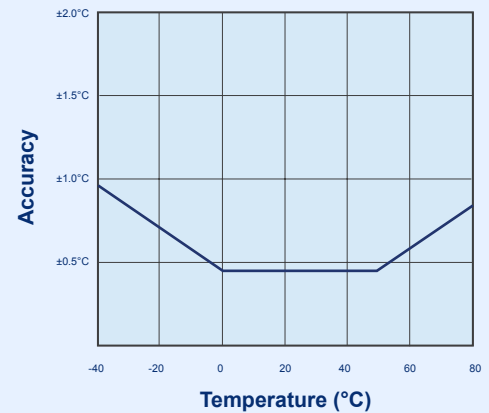


Interface Cradle

Rated Relative Humidity Reading Accuracy @ 25°C



Rated Temperature Reading Accuracy



## Product Specifications

<b>Product Model</b>	HAXO-8.
<b>Sensor Measurement Range</b>	-40°C to +85°C (-40°F to +185°F).
<b>Operating Temperature Range</b>	-40°C to +85°C (-40°F to +185°F).
<b>Storage Temperature Range</b>	0°C to +40°C (-32°F to +140°F).
<b>Humidity Measurement Range</b>	0% RH to 100% RH, with limitations.
<b>Humidity Operating Range</b>	0% RH to 100% RH, with limitations.
<b>Storage Humidity Range</b>	0-65%, non condensing.
<b>Humidity Resolution</b>	Better than 0.1% RH.
<b>Temperature Resolution</b>	Better than 0.1°C or 0.1°F
<b>Recording Capacity</b>	8,031 pairs of humidity and temperature readings 53 days @ 10min logging, 80 days @ 15min logging.
<b>Sampling Interval</b>	Configurable from 30 seconds to several hours.
<b>Logging Start Options</b>	Push button start or specific date & time.
<b>Recording Indication</b>	Flashing 'OK' indicator / flashing 'ALERT' indicator.
<b>Download Time</b>	Typically less than 10 seconds for full memory, depending on computer or readout device used.
<b>Environmental</b>	IP61.
<b>Power Source</b>	3V Li-Mg Battery. (Replaceable by qualified technician).
<b>Battery Life</b>	2 - 3 years of normal use (based on 15 minute logging, download data monthly).
<b>Real Time Clock</b>	Built-in real time clock. Rated accuracy ±25ppm @ 25°C (equivalent to 2.5 seconds/day). Rated temperature coefficient is -0.034 ±0.006ppm/°C (I.e typically +/- 0.00294 seconds/day/°C).
<b>Connection Interface</b>	Interface Cradle
<b>Software</b>	LogTag® Analyzer
<b>Size</b>	86mm(H) x 54.5mm(W) x 8.6mm(T).
<b>Weight</b>	34g.
<b>Case Material</b>	Polycarbonate.

### Re-conditioning Procedure

Exposure of the internal sensor to chemical vapors may interfere with the internal sensor and cause inaccurate readings to be logged. In a clean environment, this will slowly rectify itself. However, exposure to extreme conditions or chemical vapors will require the following reconditioning procedure to bring the internal sensor back to calibration state.

80°C (176°F) at <5%RH for 36 hours (baking) followed by 20-30°C (70-90°F) at >74%RH for 48 hours (re-hydration) High levels of pollutants may cause permanent damage to the internal sensor.

### Exposure to Chemicals

Chemical vapors may interfere with materials used for the humidity sensor. The diffusion of chemicals into the sensor's polymer may cause a shift in both offset and sensitivity. In a clean environment the contaminants will slowly outgas.

The reconditioning procedure described to the left will accelerate this process. High levels of pollutants may cause permanent damage to the humidity sensor's polymer.

