

LogTag®

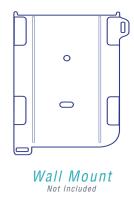
UHADO-16
USB/PDF Humidity
& Temperature Logger



LogTag's UHADO-16 is a fully configurable, multi-use USB PDF temperature and humidity logger that shows the most recent reading on the built-in display and can create reports without the need to install proprietary software or hardware at the destination.

Minimum and maximum recorded trip values can be reviewed directly on the display without the need for a PC.

## Accessories





LTI HID Not Included

## Features



Record and display Temperature & Humidity readings simultaneously.



Up to 16,000 sets of recordings - enough for the longest trip.



Real time clock provides date/time stamp for every recording.



USB micro-port for direct connection to a computer.



Automatic generation of a PDF, CSV, LTD report without special software.



Supports fast download using the standard LogTag Interface cradle.



User configuration for alarm setting, logging interval, trip duration etc.



In transit inspections can be recorded at the push of a button.



User-replaceable coin cell battery.

# Applications



Pharmaceuticals



Agriculture



Warehousing



Transportation



HVAC



Farming

# Specifications

Product Model	UHADO-16.
Sensor Measurement Range	-30°C to +70°C (-22°F to +158°F).
Operating Temperature Range	-30°C to +70°C (-22°F to +158°F).
Storage Temperature Range	+10°C to +50°C (+50°F to +122°F).*
Humidity Measurement Range	0% RH to 100% RH (non-condensing), with limitations.
Humidity Operating Range	0% RH to 100% RH (non-condensing), with limitations.
Storage Humidity Range	20% RH to 60% RH.*
Rated Temperature Reading Accuracy	Better than ±0.45°C (±0.8°F) for +0°C to +50°C (+32°F to +122°F), typically ±0.3°C (0.6°F).  Better than ±0.8°C (±1.4°F) for +50°C to +70°C (+122°F to +158°F), typically ±0.5°C (0.9°F).  Better than ±0.95°C (±1.7°F) for -40°C to +0°C (-40°F to +32°F), typically ±0.6°C (1.1°F).  Actual performance is typically much better than the rated values. Accuracy figures can be improved by recalibration.
Rated Humidity Reading Accuracy	Better than ±3%RH for 20%RH to 80%RH, typically ±2%RH. Better than ±5%RH for 0%RH to 20%RH, typically ±4%RH. Better than ±5%RH for 80%RH to 100%RH, typically ±4%RH. Actual performance is typically much better than the rated values. Accuracy figures can be improved by recalibration.
Humidity Resolution	Better than 0.1% RH.
Temperature Resolution	Better than 0.1°C or 0.1°F
Recording Capacity	16,128 pairs of humidity and temperature readings 112 days @ 10min logging, 168 days @ 15min logging. Statistics memory for displaying maximum and minimum Temperature and RH values on the LCD.
Sampling Interval	Configurable from 30 seconds to several hours.
Logging Start Options	Push button start or specific date & time.
Recording Indication	State indicator "REC."
Alarms	4 temperature and 2 humidity alarms.
Download Time	Typically less than 10 seconds for full memory, depending on computer or readout device used.
Environmental	IP61 (when hung or mounted vertically).
Power Source	CR2032 3V LiMnO <sub>2</sub> Battery (Replaceable).
Battery Life	1 year storage, 1 year of normal use (based on 15 minute logging, download data monthly).
Real Time Clock	Built-in real time clock.  Typical accuracy ±25ppm @ 25°C (equivalent to 2.5 seconds/day).
Connection Interface	Interface Cradle or USB 2.0 / Micro USB plug (cable not included).
Software	LogTag® Analyzer & LogTag® Online.
Size	93mm(H) x 54.5mm(W) x 8.6mm(T).
Weight	41g.
Case Material	Polycarbonate.
*Optimal Storage Condition	For optimal Humidity logger storage, store units in original packaging in an air conditioned area. Storage temperature shall be in the range of 10°C to 50°C and humidity at 20 to 60%RH. Ensure good ventilation (fresh air supply) in storage area to avoid high concentrations of volatile chemicals. Do not store units in the same room as solvents or any other strong smelling products.









#### **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 above will accelerate this process. High levels of pollutants may cause permanent damage to the humidity sensor's polymer.

### 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.

70°C (158°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.