

# Tinytag Thermohygrometer (-20 to +50°C/5 to 95% RH)

## TH-2500

### Issue 1

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E&OE



The Tinytag Thermohygrometer is a hand held unit to take spot readings of Temperature and Relative Humidity.

Readings are communicated via a clear LCD display. Temperature can be displayed in Celsius or Fahrenheit in 0.1 degree steps.

The unit can also function as a data logger when used in conjunction with Tinytag Explorer and a PC download cable.

The batteries are user replaceable.

### Popular Applications

- Environmental monitoring
- Food processing and storage
- Pharmaceutical manufacture
- Logistics monitoring
- Museums and art galleries

### Features (General)

- Temperature and relative humidity meter/data logger
- Switch-able °C/°F Display
- Low battery monitor
- User-replaceable battery

### Features (When Used as a Data Logger)

- 32,000 reading capacity
- High accuracy
- High reading resolution
- Fast data offload





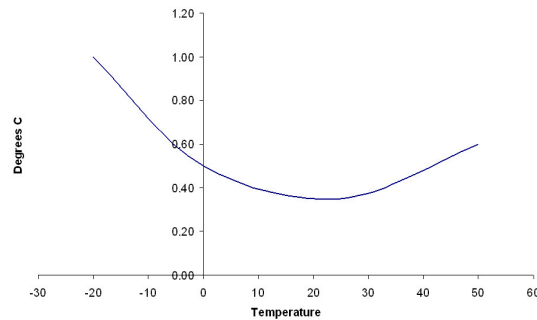
### Features

<b>Total Reading Capacity</b>	32,000 readings
<b>Memory type</b>	Non Volatile
<b>Delayed Start</b>	Relative / Absolute (up to 45 days)
<b>Stop Options</b>	When full After n Readings Never (overwrite oldest data)
<b>Reading Types</b>	Actual, Min, Max
<b>Logging Interval</b>	1 sec to 10 days
<b>Offload</b>	While stopped or when logging in minutes mode
<b>Alarms</b>	2 fully programmable; latchable

### Reading Specification

<b>Temperature</b>	
<b>Reading Range</b>	-20°C to +50°C (-4°F to +122°F)
<b>Response Time</b>	2 mins to 90% FSD in moving air
<b>Reading Resolution</b>	0.05°C or better
<b>Display Resolution</b>	0.1°C

### Accuracy



<b>Relative Humidity</b>	
<b>Reading Range</b>	5% to 95% RH
<b>Accuracy</b>	±3.0%
<b>Reading Resolution</b>	Better than 0.3% RH
<b>Display Resolution</b>	0.1%RH
<b>Sensor Location</b>	Integral
<b>Response Time</b>	15 seconds* to 90% FSD in moving air
<b>Stability</b>	<1%/year typical

\*The thermal response of humidity measurement is 2.5 minutes.

### Physical Specification

<b>IP Rating</b>	IP54
<b>Operational Range</b>	-20°C to +50°C (-4°F to +122°F)
<b>Case Dimensions</b>	
<b>Height (Including Probe)</b>	195mm / 7.68"
<b>Width</b>	65mm / 2.56"
<b>Depth</b>	23mm / 0.91"
<b>Weight (Including batteries)</b>	110g / 3.9oz

### Notes

**Battery Type** 2 x 1.5V AA Alkaline Battery

**Replacement Interval** Annually

A low battery indicator will light when the unit's batteries are getting low.

Before replacing the battery the data logger must be stopped.

Data stored on the logger will be retained after the batteries are replaced.

As well as turning the unit's display on and off, the push button on the front of the unit can be used to change the display from degrees Celsius to degrees Fahrenheit.

If moisture forms on the unit's RH sensor readings will become unpredictable. Once the sensor has dried out, and provided no residue is left behind, the unit should return to normal reading within 30 minutes.

Any dust or residue that is allowed to build up on the RH sensor will affect the unit's reading accuracy.

The sensor may be cleaned with de-ionised water or compressed air.

The RH sensor will resist small amounts of the following chemicals and substances: formaldehyde, carbon monoxide, sulphur dioxide, ethylene oxide, hydrogen chloride, hydrogen fluoride, hydrogen peroxide, nitrogen dioxide, methyl chloride, chlorine, freon, methanol, ethanol, isopropanol, ozone, diesel, automotive preservative, gasoline, motor oil, denatured alcohol, automotive solvent, window detergent, anti-freeze, bio-diesel, de-preservative agent, cleaner solvent, and battery acid. It also offers resistance to ultraviolet rays.

Salt solutions may cause permanent damage as crystals forming within the porous layers affect moisture levels there.

### Calibration

We recommend that the relative humidity channel should be checked once every six months, and the temperature channel annually, against a calibrated reference meter.

A UKAS traceable certificate of calibration can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a Service Calibration.



## Approvals

This equipment complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause any harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.

This product is manufactured by Gemini Data Loggers (UK) Ltd to BS EN ISO9001:2000 (Certificate No. 6134) and is approved to EN61326:1997 inc A1:1998, A2:2001 & A3:2003.



## Related Products

When used as a data logger the following accessories will be required:

SWCD-0040: Tinytag Explorer software (version 4.2 or above recommended).

CAB-0007: Tinytag/Tinyview Serial Download Cable

or a

CAB-0007-USB Tinytag/Tinyview USB Download Cable

data sheet