

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

TH-2500

Issue 5

17th October 2014
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





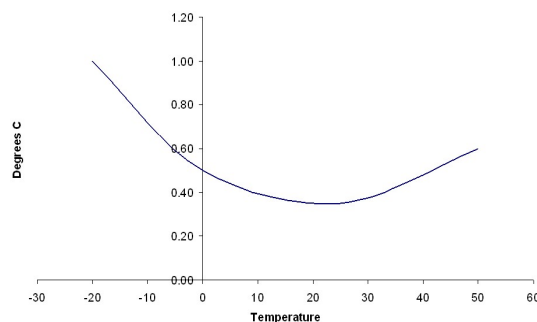
Features

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

Reading Specification

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

Accuracy
Relative Humidity



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

*The thermal response of humidity measurement is 2.5 minutes.

Calibration

This unit is configured to meet Gemini's quoted specification during its manufacture.

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 certificate of calibration, traceable to a national standard, can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a service calibration.

Physical Specification

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

If the unit is used below 0°C check that any replacement AA batteries used are rated to the temperature you require.

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-preserved 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.

Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.



Related Products

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

SWCD-0040: Tinytag Explorer software and a

CAB-0007-USB Tinytag/Tinyview USB Download Cable

The SWCD-0040 software and CAB-0007-USB cable can be ordered together in a pack using the part number SWPK-7-USB.

data sheet