

Tinytag View 2 Logger with Temperature/Relative Humidity Probe (-25 to +85°C/0 to 100% RH)

TV-4505

Issue 3

14th August 2009
E&OE

Tinytag View 2s are all housed in an attractive IP65 case and have an integral display. All feature high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor.

The TV-4505 has temperature and RH sensors mounted on a 1.5m lead and is ideal for measuring temperature and RH in difficult to access areas such as packing cases containing works of art.

Popular Applications

- Document storage monitoring
- Museum monitoring
- Climate monitoring



Features

- Temperature and relative humidity recorder
- LCD display of current readings
- 30,000 reading capacity
- High accuracy
- High reading resolution
- Fast data offload
- Splash-proof case
- Low battery monitor
- User-replaceable battery





Features

Total Reading Capacity	30,000 readings
Memory type	Non Volatile
Display	4 digits + indicators
Display Modes	°C or °F / %RH
Display Refresh Rate	Every 2 seconds (alternating temperature/humidity)
Trigger Start	Magnetic Switch
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

Physical Specification

IP Rating	IP65 splash proof (see notes)
Combined Weight	150g / 5.29oz

Logger

Operational Range*	-25 °C to +70 °C
Case Dimensions	
Diameter	60mm / 2.36"
Length	90mm / 3.54"
Width	77mm / 3.03"
Depth	35mm / 1.38"

Probe

Operational Range*	-25 °C to +85 °C
Probe Dimensions	
Length	70mm / 2.76"
Diameter	8mm / 0.31"
Cable Length	1.5m / 59.06"

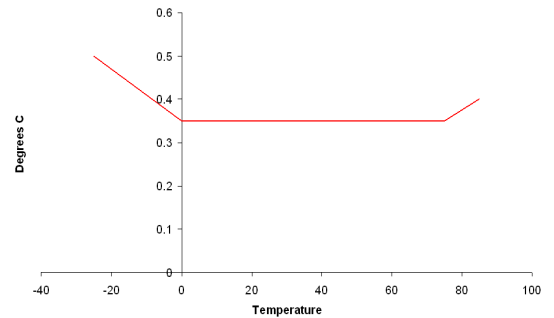
*The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record.

Reading Specification

Temperature

Reading Range	-25 °C to +85 °C (-13 °F to 185 °F)
Sensor Type	10K NTC Thermistor (external probe)
Response Time	3 mins to 90% FSD in moving air
Logger Resolution	0.02 °C or better
Display Resolution	0.1 °C or 0.1 °F
Temperature Stability	0.005 °C/°C Change from 25 °C

Logger Accuracy



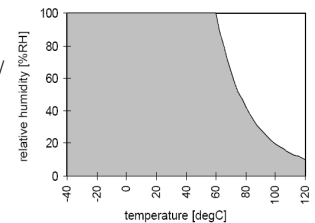
Relative Humidity

Reading Range	0 to 100% RH
Sensor Type	Capacitive (external probe)
Response Time	5 sec to 90% FSD in still air
Reading Resolution	Better than 0.3% RH
Display Resolution	0.1% RH
Reading Accuracy	±3.0% at 25 °C (77 °F)

RH Sensor Working Range

The working range for the RH sensor is shown in terms of relative humidity / temperature limits.

Although the sensor will not fail beyond these limits, the accuracy will deteriorate.





Notes

Battery Type Tekcell SBAA02P;
SAFT LS14250 or LST14250

The logger will operate with other ½AA 3.6V Lithium (Li-SOCl₂) batteries but performance cannot be guaranteed.

Replacement Interval Annually

Before replacing the battery the data logger must be stopped.

Data stored on the logger will be retained after a battery is replaced.

The clarity of the display may change at extremes of temperature.

If used at low temperatures the data logger should be allowed to warm to room temperature before it is opened to avoid condensation forming inside the unit.

The IP65 rating is valid only when the unit's connector cap is securely fitted.

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 pure isopropanol, but not with abrasive detergents, as scratches or residue will affect the accuracy.

The RH sensor will resist small amounts of the following chemicals: formaldehyde, ammonia, carbon monoxide, sulphur dioxide, ethylene oxide, hydrogen chloride, hydrogen fluoride, hydrogen peroxide, nitrogen dioxide, methyl chloride, chlorine, freon, methanol, ethanol, isopropanol and ozone. 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

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

As the data logger and its probe are supplied as a matched pair, probes and units are not interchangeable.

We recommend that the calibration of this unit should be checked every six months 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.

Gemini Data Loggers (UK) Ltd. operates a Quality Management System which conforms to ISO 9001. The scope of the system covers the manufacture, design and supply of data loggers and their associated software, accessories and services.



Required and Related Products

To use this data logger you will require one of the following pieces of software:

SWCD-0040: Tinytag Explorer software or
SW-0500: Easyview Pro software

and a

CAB-0007-USB: Tinytag Ultra/Plus/View USB Download Cable

Further related products:

CAB-0007: Tinytag Ultra/Plus/View Serial Download Cable
SER-9550: Tinytag View 2 Service Kit
ACS-5000: Tinytag Alarm Box
ACS-6000: Trigger Start Magnet