

## Tinytag View 2 Temperature/Relative Humidity Logger (-25 to +50 °C/0 to 100% RH)

### TV-4500

**Issue 2**  
23rd November 2007  
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.

With integral temperature and humidity sensors, the TV-4500 is ideal for monitoring temperature and humidity of offices, cold storage rooms, museum exhibits and many other applications where a visual temperature and humidity indication is needed.

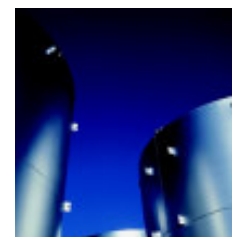
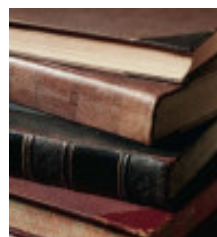
#### Popular Applications

- 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

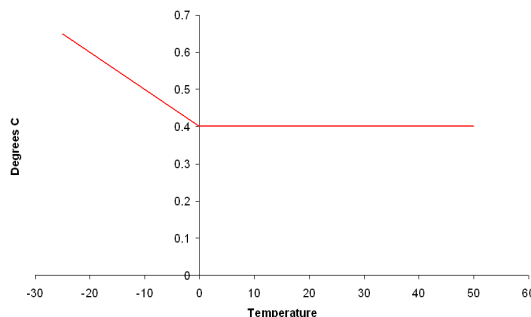
<b>Total Reading Capacity</b>	30,000 readings
<b>Memory type</b>	Non Volatile
<b>Display</b>	4 digits + indicators
<b>Display Modes</b>	°C or °F / %RH
<b>Display Refresh Rate</b>	Every 2 seconds (alternating temperature/humidity)
<b>Trigger Start</b>	Magnetic Switch
<b>Delayed Start</b>	Relative / Absolute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

### Reading Specification

#### Temperature

<b>Reading Range</b>	-25 °C to +50 °C (-13 °F to 122 °F)
<b>Sensor Type</b>	10K NTC Thermistor (Integral)
<b>Response Time</b>	10 mins to 90% FSD in moving air
<b>Logger Resolution</b>	0.02 °C or better
<b>Display Resolution</b>	0.1 °C or 0.1 °F

#### Logger Accuracy



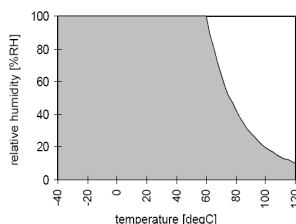
#### Relative Humidity

<b>Reading Range</b>	0 to 100% RH
<b>Sensor Type</b>	Capacitive (Integral)
<b>Response Time</b>	10 sec to 90% FSD in still air
<b>Reading Resolution</b>	Better than 0.3% RH
<b>Display Resolution</b>	0.1% RH
<b>Reading Accuracy</b>	±3.0% at 25 °C

#### 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.



### Physical Specification

<b>IP Rating</b>	IP65 splash proof (see notes)
<b>Operational Range*</b>	-25 °C to +70 °C
<b>Case Dimensions</b>	
<b>Diameter</b>	60mm / 2.36"
<b>Length</b>	90mm / 3.54"
<b>Width</b>	65mm / 2.56"
<b>Depth</b>	35mm / 1.38"
<b>Weight</b>	85g / 3oz

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

### Notes

<b>Battery Type</b>	Tekcell SBAA02P; SAFT LS14250 or LST14250
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The logger will operate with other ½AA 3.6V Lithium (Li-SOCl<sub>2</sub>) batteries but performance cannot be guaranteed.

<b>Replacement Interval</b>	Annually
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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.

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 BS EN ISO 9001:2000. 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