



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

TV-4506

# Issue 6

17th October 2014 E&OE Tinytag View 2s are all housed in attractive IP65 cases and have integral displays. All feature high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor.

The TV-4506 has a temperature and relative humidity probe with a 1.5m cable length. This unit features a coated RH sensor that has good resistance to moisture and condensation, ensuring measurement reliability.

### **Popular Applications**

- Environmental monitoring
- Glass house and poly tunnel agriculture
- Food processing and storage
- Pharmaceutical manufacture
- Logistics monitoring
- Conservation Projects



## 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



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**TV-4506** 





Features		
Total Reading Capacity	30,000 readings	
Memory type	Non Volatile	
Display	4 digits + indicators	
Display Modes	℃ or ℉ / %RH	
<b>Display Refresh Rate</b>	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; latchable	
Physical Specification		
Physical Specific	ation	
IP Rating	IP65 splash proof (see notes)	
IP Rating	IP65 splash proof (see notes)	
IP Rating Combined Weight	IP65 splash proof (see notes)	
IP Rating Combined Weight Logger	IP65 splash proof (see notes) 150g / 5.29oz	
IP Rating Combined Weight Logger Operational Range*	IP65 splash proof (see notes) 150g / 5.29oz	
IP Rating Combined Weight Logger Operational Range* Case Dimensions	IP65 splash proof (see notes) 150g / 5.29oz -25℃ to +70℃	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter	IP65 splash proof (see notes) 150g / 5.29oz -25 ℃ to +70 ℃ 60mm / 2.36"	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length	IP65 splash proof (see notes) 150g / 5.29oz -25 ℃ to +70 ℃ 60mm / 2.36" 90mm / 3.54"	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length Width	IP65 splash proof (see notes) 150g / 5.29oz -25 ℃ to +70 ℃ 60mm / 2.36" 90mm / 3.54" 77mm / 3.03"	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length Width Depth	IP65 splash proof (see notes) 150g / 5.29oz -25 °C to +70 °C 60mm / 2.36" 90mm / 3.54" 77mm / 3.03"	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length Width Depth Probe	IP65 splash proof (see notes) 150g / 5.29oz -25 °C to +70 °C 60mm / 2.36" 90mm / 3.54" 77mm / 3.03" 35mm / 1.38"	
IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length Width Depth Probe Operational Range*	IP65 splash proof (see notes) 150g / 5.29oz -25 °C to +70 °C 60mm / 2.36" 90mm / 3.54" 77mm / 3.03" 35mm / 1.38"	
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IP Rating Combined Weight Logger Operational Range* Case Dimensions Diameter Length Width Depth Probe Operational Range* Probe Dimensions Length	IP65 splash proof (see notes) 150g / 5.29oz -25 ℃ to +70 ℃ 60mm / 2.36" 90mm / 3.54" 77mm / 3.03" 35mm / 1.38" -25 ℃ to +85 ℃ 70mm / 2.76"	

\*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 Sensor Type		-25℃ to +85℃ (-13℉ to 185℉) 10K NTC Thermistor (external probe)
Response	Time	3 mins to 90% FSD in moving air
Logger Resolution		0.02 ℃ or better
Display Resolution		0.1 ℃ or 0.1 ℉
Temperatu	ire Stability	0.005℃/℃ Change from 25℃
Logger Accuracy		
	0.6	
0.5 - 0.4 - 0.3 - 0.2 - 0.1 -		
	0.4 -	
	0.3 -	
	0.2 -	
	0.1 -	

#### **Relative Humidity**

-20

0

20

Temperature

40

-40

Reading Range Sensor Type Reading Accuracy Reading Resolution Display Resolution Response Time 0 to 100% RH Capacitive (external probe) ±3.0% RH at 25 ℃ (77 °F) Better than 0.3% RH 0.1% RH 40 seconds to 90% FSD (current data loggers, from SN 619201)

60

80

100

#### **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.



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## **Tinytag View 2 Logger with Temperature/Relative Humidity** Probe (-25 to +85 °C/0 to 100% RH) Grey Case TV-4506

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## Notes

**Battery Type** 

Tekcell SBAA02P: SAFT LS14250 or LST14250

The logger will operate with other 1/2AA 3.6V Lithium (Li-SOCI2) batteries but performance cannot be guaranteed.

#### Replacement Interval Annually

Before replacing the battery the data logger must be stopped.

After removing an old battery from a logger, wait five minutes before inserting the new one

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.

The coated sensor used on this unit (current product, SN 619201 and above) provides good protection from moisture and condensation, but in some cases - where the sensor becomes saturated - readings may 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 but not with pure isopropanol or abrasive detergents, as these may damage the coating on the sensor and effect its 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 ravs.

### 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 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.

### Approvals

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



### **Required and Related Products**

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

SWCD-0040: Tinytag Explorer software

and a

CAB-0007-USB: Tinytag Ultra/Plus/View 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.

#### **Further Related Products**

SER-9500: Tinytag Data Logger Service Kit ACS-5000: Tinytag Alarm Box ACS-6000: Trigger Start Magnet