Gemini DATA LOGGERS

Tinytag

DATA SHEET

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

TV-4505

Issue 8
9th August 2019
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.

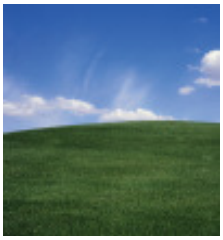
The TV-4505 has a temperature and relative humidity probe with a 1.5m cable length. This unit features a coated RH sensor that has good resistance to moisture and condensation, ensuring measurement reliability.

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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Features

Total Reading Capacity	30,000 readings
Memory type	Non Volatile
Display	4 digits + indicators
Display Modes	℃ or ℉ / %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; latchable

Physical Specification

IP Rating	IP65 splash proof (see notes)
Combined Weight	150g / 5.29oz
Logger	
Operational Range*	-25℃ to +70℃
Case Dimensions	
Diameter	60mm / 2.36”
Length	90mm / 3.54”
Width	77mm / 3.03”
Depth	35mm / 1.38”
Probe	
Operational Range*	-25℃ to +85℃
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.

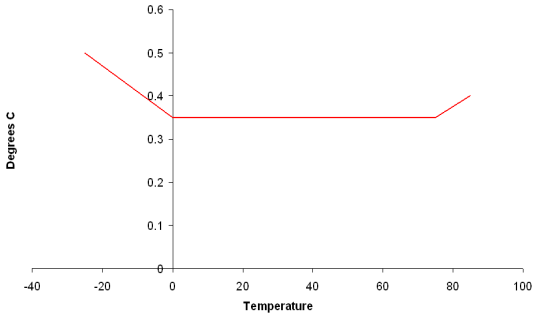
Reading Specification

Temperature

Reading Range	-25℃ to +85℃ (-13℉ to 185℉)
Sensor Type	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℉
Temperature Stability	0.005℃/℃ Change from 25℃

Logger Accuracy

Relative Humidity

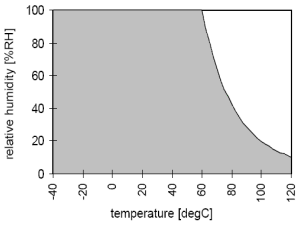


Reading Range	0 to 100% RH
Sensor Type	Capacitive (external probe)
Reading Accuracy	±3.0% RH at 25℃ (77℉)
Reading Resolution	Better than 0.3% RH
Display Resolution	0.1% RH
Response Time	40 seconds to 90% FSD (current data loggers, from SN 619201)

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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Notes

The battery fitted in this product is a single cell containing less that 1g of lithium and meets the requirements of the UN Manual of Tests and Criteria, Part III, Subsection 38.3.

Recommended Battery Types SAFT LS14250, Tekcell SBAA02P or Eve ER14250

The logger will operate with other ½AA 3.6V Lithium 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 rays.

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.

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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-6000: Trigger Start Magnet

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