DATA SHEET

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

TV-4500

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E&OE

Tinytag View 2s are a range of data loggers with displays. Featuring high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor, these units are housed in splash-proof (IP65 rated) cases.

The TV-4500 is a self contained temperature and relative humidity data logger. This unit features a coated RH sensor that has good resistance to moisture and condensation, ensuring measurement reliability in applications where a visual display of temperature and humidity is required in addition to data logging.

Popular Applications

• Environmental Monitoring

• Pharmaceutical storage

• Document and archive 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

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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

Reading Specification

Temperature

Reading Range	-25℃ to +50℃ (-13℉ to 122℉)
Sensor Type	10K NTC Thermistor (Integral)
Response Time	10 mins to 90% FSD in moving air
Logger Resolution	0.02℃ or better
Display Resolution	0.1℃ or 0.1℉
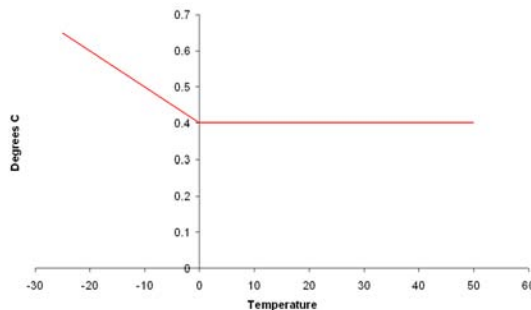
Logger Accuracy

Relative Humidity

Reading Range	0 to 100% RH
Sensor Type	Capacitive (Integral)
Accuracy	±3.0% RH at 25℃ / 77℉
Reading Resolution	Better than 0.3% RH
Response Time	40 seconds to 90% FSD (current data loggers, from SN 612487)
Display Resolution	0.1% RH

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.
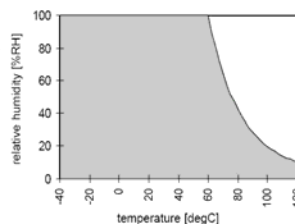
Physical Specification

IP Rating	IP65 splash proof (see notes)
Operational Range*	-25℃ to +70℃
Case Dimensions	
Diameter	60mm / 2.36"
Length	90mm / 3.54"
Width	65mm / 2.56"
Depth	35mm / 1.38"
Weight	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

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.

The coated sensor used on this unit (current product, SN 612487 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, salts 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.

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.

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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 Quality and Environmental Management Systems which conform to ISO 9001 and ISO 14001. The scope of these systems 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-9500: Tinytag Data Logger Service Kit
ACS-5000: Tinytag Alarm Box
ACS-6000: Trigger Start Magnet

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