Gemini DATA LOGGERS

Tinytag

DATA SHEET

Tinyview Plus Dual Channel Temperature/Relative Humidity (-30 to +50°C/0 to 100% RH)

TV-1500

Issue 8
5th February 2007
E&OE

The TV-1500 is equipped with an LCD display to provide instant indication of temperature, humidity and alarm conditions.

The logger is made with food grade materials and is most commonly used in fridges and chill cabinets.

Popular Applications

- Environmental monitoring
- Pharmaceutical manufacture
- Food storage and transport
- Building monitoring
- Museum display and repository

Features

- Temperature and relative humidity recorder
- LCD display of current readings
- 30,000 reading capacity
- User-programmable logging interval
- 2 user-programmable alarms
- Delayed and trigger start options
- 3 stop options
- Splash proof case
- User-replaceable battery






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Features

Total Reading Capacity	30,000 readings
Memory type	Non Volatile
Display	4 digits + indicators
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

Case Material	Noryl
IP Rating	IP65 splash proof (see notes)
Operational Range*	-30°C to +70°C
Case Dimensions	
Diameter	60mm / 2.36”
Length	88mm / 3.46”
Width	65mm / 2.56”
Depth	35mm / 1.38”
Weight	85g / 3oz

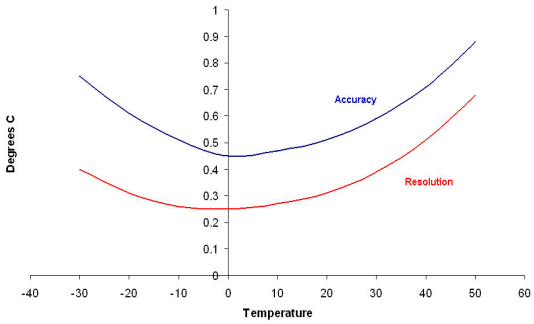
*The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record.

Reading Specification

Temperature

Reading Range	-30°C to +50°C
Sensor Type	10K NTC Thermistor (Integral)
Response Time	10 mins to 90% FSD in moving air

Reading Resolution and Overall Accuracy



Display Resolution	0.5°C

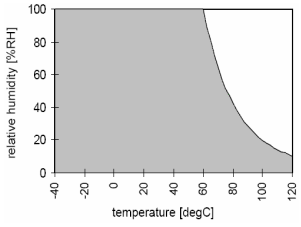
Relative Humidity

Reading Range	0% to 100% RH
Sensor Type	Capacitive (Integral)
Response Time	10 sec to 90% FSD in still air
Reading Resolution	Typically 0.5%RH
Display Resolution	0.5% RH
Sensor Accuracy	±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.



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Notes

Battery Type SAFT LS14250 or LST14250; Tekcell SBAA02P

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 IP68 rating does not apply to the unit's RH sensor.

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 relative humidity channel should be checked once every six months, and the temperature channel annually, 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.

This product is manufactured by Gemini Data Loggers (UK) Ltd to BS EN ISO9001:2000 (Certificate No. 6134).

Required and Related Products

To use this data logger you will also require:

SWCD-0040: Tinytag Explorer software
or
SW-1500: Easyview Light software
or
SW-0500: Easyview Pro software

and a

CAB-0007-USB: Tinytag/Tinyview USB Download Cable or
CAB-0007: Tinytag/Tinyview PC Serial Download Cable

Further related products:

SER-9550: Tinyview Plus Service Kit
ACS-6000: Trigger Start Magnet

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