Gemini DATA LOGGERS

Tinytag

DATA SHEET

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

TV-1506

Issue 3
11th January 2006
E&OE

The TV-1506 is equipped with an LCD display to provide instant indication of temperature, humidity and alarm conditions.

The unit is supplied in a grey case for discrete monitoring in museums and art galleries.

Popular Applications

- Museum display and repository
- Environmental monitoring
- Building monitoring

Features

- Temperature and relative humidity recorder with sensors mounted on a remote probe
- 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; latch-able

Physical Specification

Case Material	Noryl
IP Rating	IP65 splash proof (see notes)
Combined Weight	150g / 5.29oz
Logger	
Operational Range*	-30°C to +70°C
Case Dimensions	
Diameter	60mm / 2.36”
Length	84mm / 3.31”
Width	76mm / 2.99”
Depth	35mm / 1.38”
Probe	
Operational Range*	-40°C to +85°C
Probe Dimensions	
Length	70mm / 2.76”
Diameter	8mm / 0.31”
Cable Length	1.5m / 59.06”

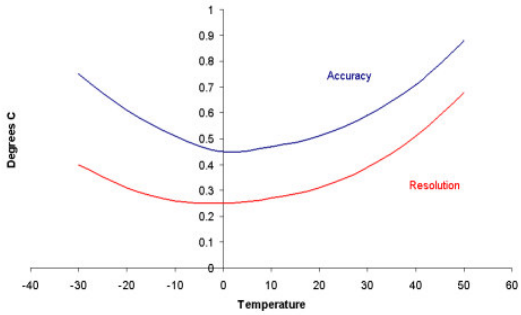
*The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record.

Reading Specification

Temperature

Reading Range	-30°C to +50°C
Sensor Type	10K NTC Thermistor (external probe)
Response Time	3 mins to 90% FSD in moving air

Reading Resolution and Overall Accuracy



Display Resolution	0.5°C (1°F)

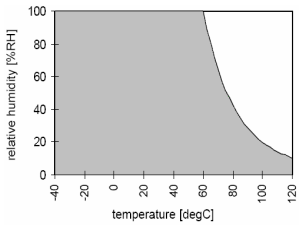
Relative Humidity

Reading Range	0% to 100% RH
Sensor Type	Capacitive (external probe)
Response Time	5 sec to 90% FSD in still air
Reading Resolution	Better than 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 LST14250 3.6v ½AA Lithium Cell
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, which does not include the unit's probe, 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.

As the data logger and its probe are supplied as a matched pair, probes and units are not interchangeable.

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: Tinytag PC Serial Download Cable

Further related products:

CAB-USB: USB to Serial Converter
ACS-6000: Trigger Start Magnet
SER-9550: Tinyview Plus Service Kit

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