

Tinytalk Relative Humidity (0 to 95% RH)

TK-0302

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E&OE

Tinytalks are compact, lightweight, economical loggers housed in a 35mm film canister.

These loggers are used in a wide range of applications including fridge monitoring, building condition monitoring and academia.

The TK-0302 is self contained unit with a relative humidity sensor.

Popular Applications

- Building condition monitoring
- Pharmaceutical storage
- Dry food storage
- Museum display and repository



Features

- Relative humidity recorder
- 1,800 reading capacity
- User-programmable logging interval
- 3 stop options
- Splash proof case
- User-replaceable battery





Features

Total Reading Capacity	1,800 readings
Memory type	Non Volatile
Delayed Start	Relative / Absolute (up to 45 days)
Stop Options	When full After n Readings Never (overwrite oldest data)
Logging Interval	1 sec to 4.5 hours
Offload	While stopped

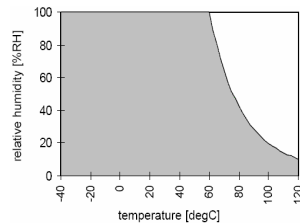
Reading Specification

Reading Range	0% to 95% RH
Sensor Type	Capacitive (External)
Accuracy	±3.0% at 25°C / 77°F
Reading Resolution	Typically 0.5%RH
Response Time	10 seconds to 90%

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

Ingress Protection	Not water-proof
Operational Range*	-40°C to +85°C (-40°F to +185°F)
Case Dimensions	
Diameter	34mm / 1.34"
Height	54mm / 2.13"
Weight	50g / 1.8oz

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

Calibration

This unit is configured to meet Gemini's quoted 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.

Notes

Battery Type SAFT LS14250 or LST14250;
Tekcell SBAA02P

The logger will operate with other 1/2AA 3.6V Lithium (Li-SOCl₂) batteries but performance cannot be guaranteed.

Replacement Interval Every two years

Before replacing the battery the data logger must be stopped.

Data stored on the logger will be retained after a battery is replaced.

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.

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.

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-0005: Tinytag Transit / Tinytalk PC Serial Download Cable

Further related products:

CAB-USB: USB to Serial Converter
SER-9510: Tinytalk Service Kit