# Gemini Data Sheet

# Tinytag Intrinsically Safe Relative Humidity TGIS-0304

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### **Mechanical Data**

Case Style: IP68 Style, RED

#### **Case Dimensions**

Height: 34mm / 1.34 Width: 57mm / 2.25 Depth: 80mm / 3.15 Weight: 110g / 3.9 oz.

#### **Features**

Memory Size: 8k (Non-volatile)

No. of Readings: 7900 Resolution: 8 bit

Delayed Start: Relative / Actual

up to 45 days

Stop Options: When Full

After n Readings Never (Wrap around)

Reading Types: Actual, Min, Max. Logging Interval: 1 sec to 10 days

Offload: While stopped or

when logging in minute multiples

Alarms : Two, fully

 $\begin{array}{c} {\rm Program mable} \\ {\rm Functional\ Range: -20^{\circ}C\ to\ +85^{\circ}C^{*}\ /} \end{array}$ 

IP Rating: IP68 waterproof (see special notes)

Battery Life: Up to 5 years

#### Notes:

Battery replacement recommended every 2 years. It must only be replaced in a non-hazardous area, with Saft LS14250 3.7V 1/2AA Lithium cells. Stop the unit logging before replacing the battery.

\*Functional Range describes the limits to which the datalogger may be subjected, **not** the range over which it will record or is I.S. approved.

#### **Special Notes**

This range of logger must only be used in accordance with SCS No. Ex 96D2069X, a copy of which is supplied with the logger and is available on request.

Connections for launching and downloading, etc. may only be made in non-hazardous areas. The IP68 waterproof rating **does not** include the sensor, is only valid to 50ft (15 m) and only when the connector cap is securely fitted to the connector.

When using the units at low temperatures, condensation may form. Before opening the case, allow the units to reach room temperature.

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 within the porous layers affect moisture levels there.

#### **Sensor Details**

Range: 0 to 100% RH Sensor Type: Capacitive

Sensor Accuracy: ± 5% at 25°C / 77°F

Temp. Dependency: Low

Response Time: 10 sec to 90%

(Non-condensing)

Resolution: Better than 0.5%RH

#### Notes:

The sensor is mounted on the side of the unit. It has excellent long-term performance and can be wetted without damage, however the accuracy will be temporarily impaired and it should be allowed up to 30 minutes to recover. The sensor has good resistance to pollutants, and can be cleaned in de-ionised water or pure isopropanol but **not with abrasive detergents.** Surface scratches or residue will compromise the accuracy.

#### **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) this device must accept any interference received, including interference that may cause undesired operation.

This product is manufactured by Gemini Data Loggers (UK) Ltd. to EN ISO 9002 part 2 (Certificate No. 6134), and is CE approved to EN50081 part 1:1992 and EN50082 part 1 and 2:1992/95 with any standard leads or probes supplied.



I.S. Approved to: **EEx ia IIC T4** (T<sub>amb</sub> = 40°C) **T3** (T<sub>amb</sub> = 75°C)





NAMAS traceable calibration certificates are available on individual units.

#### **Interface Information and Related Products**

#### To use your Tiny Data Logger you will require:

Tinytag interface cable (CAB-0007), PC with GLM for Windows ™ (SW-0009) or Easyview for Windows 95™ (SW-0500); or Psion handheld computer, with Tinylink version 2.0 or above (SW-1101) and suitable cable (See Tinylink Data Sheet).

#### **Further Related Products:**

SER-9531 Tinytag I.S. Service Kit including battery and seal

TGIS-0017 Tinytag Intrinsically Safe Temperature Range G (-40°C to +125°C) for Standard Probe.

## **Applications**

Hazardous Areas

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