Tinytalk Temp. PT100 with Ext. Sensor

Issue 9: 27th February 2003



Features

Memory Size: 2k (Non-volatile)

No. of Readings: 1800 Resolution: 8 bit

Delayed Start: Relative / Actual

up to 45 days

Stop Options: When Full

After n Readings Never (Wrap around)

Reading Types: Actual

Logging Interval: 1 sec to 4.5 hours

Offload: When not logging Functional Range : 0°C → +85°C/

32°F → +185°F

IP Rating: IP20

Battery Life: Up to 2 years

Sensor Details

Range: $-50^{\circ}C \rightarrow +300^{\circ}C/$

-58°F → +572°F

Sensor Type: PT100

Sensor location: Stainless probe Probe length: 150mm / 5.9" Probe width: 6mm / 0.24" Cable length: 1m / 39.4"

Response Time: 15 s to 90% (water)

50 sec to 90% (air)

Sensor accuracy : ±1°C (0°C → 150°C) ±1.8°F (32 → 302°F)

Resolution: 1°C at 0°C/

1.8°F at 32°F

Note: The temperature range is the maximum to which the tip of the probe may be exposed. High temperatures at the back of the probe may cause damage to the sleeving and reduce accuracy.

Mechanical Data

Case Style: 35mm Film canister

Case Dimensions

Diameter: 34mm / 1.34" Length: 54mm / 2.13" Weight: 30g / 1 oz. (approx.)

Notes:

Battery replacement recommended once a year. It may be replaced with Saft 3.6V 1/2AA Lithium cells. Stop the unit logging before replacing the battery.

Functional Range describes the range over which the logger will function, not the sensor range over which it will record.

This logger uses the most commonly used 'European curve' PT100 element, with an α value of 0.00385.

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 BS EN ISO 9001:2000 (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.





NAMAS traceable calibration certificates are available on individual units.

Special Notes

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

The canister lid must be removed to gain access to the 3.5mm jack socket for the RS232 interface cable.

Interface Information and Related Products

To use your Tinytalk Data Logger you will require:

Tinytalk interface cable (CAB-0005), PC with GLM for Windows ™ (SW-0009) or Easyview for Windows 95™ (SW-0500).

Further Related Products:

SER-9510 Tinytalk Service Kit including battery and silica gel pack

Tinytalk Range G (-40°C to +125°C / -40°F to +257°F) with external sensor probe TK-0023

TK-0063 Tinytalk Range H (-30°C to +50°C / -22°F to +122°F) with external sensor probe (narrowest range but best resolution).