

Tinytag Plus 2 External Temperature For PT1000 3-Wire Probe (-200 to +100 °C)

TGP-4204

Issue 8
14th August 2009
E&OE

The workhorse of the Gemini range the Tinytag Plus 2 data loggers are housed in robust, waterproof (IP68) rated cases that are designed for use in harsh and outdoor applications.

Tinytag Plus 2 data loggers have a high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor.

The TGP-4204 uses an external probe (not included) to record in cryogenic applications.

Popular Applications

- Food processing and storage
- Cryogenic storage
- Logistics monitoring



Features

- Cryogenic temperature recorder
- 32,000 reading capacity
- High accuracy
- High reading resolution
- Fast data offload
- Robust, waterproof case
- Low battery monitor
- User-replaceable battery





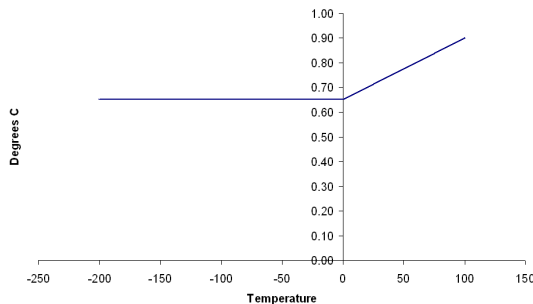
Features

Total Reading Capacity	32,000 readings
Memory type	Non Volatile
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; latching

Reading Specification

Reading Range	-200 °C to 100 °C (-328 °F to 212 °F)
Sensor Type	3-Wire PT1000 (external probe)
Reading Resolution	0.01 °C or better
Temperature Stability	±0.01 °C/°C change from 25 °C
Accuracy	

The graph below is the accuracy of the TGP-4204 when used with a PB-7002 probe.



Physical Specification

IP Rating	IP68 water-proof (see notes)
Operational Range*	-25 °C to +85 °C (-13 °F to +185 °F)
Case Dimensions	
Height	34mm / 1.34"
Width	59mm / 2.32"
Depth	80mm / 3.15"
Weight	110g / 3.9oz

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

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.

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 IP68 rating is valid only when the unit's connector cap and probe are fitted and is valid to a depth of 15m (50ft).

The position of the unit's trigger start switch is indicated by the ••• label on the back of the logger. When the "Wait until trigger event" option is selected in the Tinytag Explorer software, the green LED on the unit will flash once every eight seconds, indicating that the unit is waiting to log. When a magnet is held next to the label, the green LED will light until the magnet is removed to show that the switch is closed. After the magnet has been removed, the green LED will flash every four seconds to indicate that the logger is recording.

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 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 data logger is approved to EN61326:1998 with any standard leads or probes supplied.

Gemini Data Loggers (UK) Ltd. operates a Quality Management System which conforms to ISO 9001. The scope of the system covers the manufacture, design and supply of data loggers and their associated software, accessories and services.





Required and Related Products

To use this data logger you will also require one of the following probes:

PB-7002-1M5/3M: Standard 3-wire PT1000 Probe (-200 °C to +100 °C) or
PB-7003-1M5/3M/5M: PT1000 Freezer Probe (-80 to +100 °C)

One of the following pieces of software:

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

and a

CAB-0007-USB: Tinytag Ultra/Plus/View USB Download Cable

Further related products:

CAB-0007: Tinytag Ultra/Plus/View Serial Download Cable
SER-9530: Tinytag Plus/IS Service Kit
ACS-6000: Trigger Start Magnet