DATA SHEET

Tinytag Plus 2 Wide Range Temperature Data Logger for PT1000 3-Wire Probe (-200 to +250°C)

TGP-4205

Issue 2
9th August 2019
E&OE

This data logger has been designed to work across a wide temperature range, making it suitable for use in a number of diverse applications.

The logger uses a probe (not supplied) to record temperatures between -200 and +250°C and is ideal for use in cryogenic applications and fridge, freezer and incubator monitoring.

The logger can be used for both short term monitoring, in applications such as equipment validation and commissioning, and also for the long term monitoring of product storage temperatures.

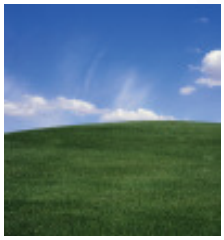
This battery powered data logger has a high accuracy and reading resolution and is housed in a robust, waterproof case.

Popular Applications

- Laboratory monitoring, including:
  - Cryogenic storage
  - Fridge and freezer monitoring
  - Incubators
- Temperature mapping
- Equipment validation

Features

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






For pricing or any further information, please contact Omni Instruments Ltd.

Measurement and data acquisition solutions

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Features

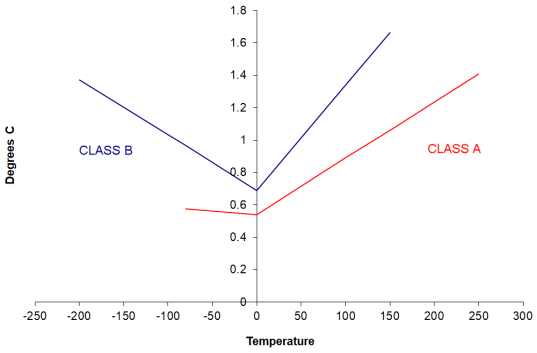
Total Reading Capacity	32,000 readings
Memory type	Non Volatile
Trigger Start	Magnetic Switch
Delayed Start	Relative / Absolute (up to 45 days)
Stop Options	When full After n Readings Never (overwrite oldest data)
Reading Types	Actual, Min, Max
Logging Interval	1 sec to 10 days
Offload	While stopped or when logging in minutes mode
Alarms	2 fully programmable; latchable

Reading Specification

Reading Range	-200°C to 250°C (-328°F to 482°F)
Sensor Type	3-Wire PT1000 (external probe)
Reading Resolution	0.01°C or better
Temperature Stability	±0.015°C/°C change from 25°C

Accuracy

The graph below shows the overall accuracy of the TGP-4205 when used with a Class A or B PT1000 sensor.



Physical Specification

IP Rating	IP68 water-proof (see notes)
Operational Range*	-40°C to +85°C (-40°F to +185°F)
Case Dimensions	
Height	34mm / 1.34"
Width	59mm / 2.32"
Depth	80mm / 3.15"
Weight	95g / 3.35oz

*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 annually against a calibrated reference meter.

A certificate of calibration, traceable to a national standard, can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a service calibration.

Notes

The battery fitted in this product is a single cell containing less that 1g of lithium and meets the requirements of the UN Manual of Tests and Criteria, Part III, Subsection 38.3.

Recommended Battery Types SAFT LS14250, Tekcell SBAA02P or Eve ER14250

The logger will operate with other ½AA 3.6V Lithium 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 passed over the label, the green LED will light briefly to indicate that the unit has been activated. Once activated, the green LED will flash every four seconds to indicate that the logger is recording.

Approvals

Gemini Data Loggers (UK) Ltd. operates a Business Management System which conforms to ISO 9001 and ISO 14001.

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Required and Related Products

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

PB-7005-1M5/3M: Cryogenic flat cable PT1000 Probe (-200 to +150°C)

Or

PB-7006-1M5/3M: Wide range flat cable PT1000 Probe (-80 to +250°C)

The following software:

SWCD-0040: Tinytag Explorer software

and a

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

The software and cable can be purchased together in a discounted pack:

SWPK-7-USB Tinytag Explorer and USB Cable Pack

Further related products:

SER-9500: Tinytag Data Logger Service Kit
ACS-6000: Trigger Start Magnet

data sheet

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