DATA SHEET

Tinytag Plus Re-Ed XP Millivolt Input Logger (0 to 200mV)

TGPR-1002

Issue 9
7th December 2007
E&OE

A millivolt input data logger that has an internal battery pack, which can be used to power an external sensor, this unit is housed in a robust, splash-proof case.

The TGPR-1002 can be used to record the output from a number of industry standard sensors.

Common applications include mains and power consumption monitoring.

Popular Applications

- Customised data logging:
    - CO_2
    - Pressure
    - Flow Rate
    - Light
    - Power (with a current clamp)

Features

- Millivolt input data logger
- 12V, 2500mAh power supply
- 16,000 reading capacity
- User-programmable logging interval
- 2 user-programmable alarms
- Delayed start options
- 3 stop options
- Robust, waterproof case
- User-replaceable battery

Gemini
DATA LOGGERS

Features

Total Reading Capacity	16,000 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 10 days
Offload	While stopped or when logging in minutes mode
Alarms	2 fully programmable; latchable
XP Power Output	12V, 50mA (typical)

Reading Specification

Range	0 to 200mV DC
Maximum Input	500mV
Input Impedance	>10MΩ
Resolution	0.8mV
Accuracy	±1mV ±0.5% of reading

Physical Specification

IP Rating	IP65 splash-proof (see notes)
Operational Range*	-25°C to +85°C (-13°F to +185°F)
Case Dimensions	
Height	75mm / 2.95"
Width	75mm / 2.95"
Length	110mm / 4.33"
Weight	655g / 23.1oz

*The Operational Range indicates the physical limits to which the unit can be exposed.

Connection Information

The Tinytag Plus Re-Ed Current Logger can be used with a CAB-3239 Tinytag Voltage/XP Input Lead or an ACS-9703 5-Pin Plug.

The connection details for the cable and plug are as follows:

CAB-3239	5-Pin Plug	Function
Red	A	Reference*
Green	B	12V*
White	C	Not Connected
Black	D	Common/0V
Yellow	E	Signal Input

*See Notes.

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.

Notes

Battery Type (Logger)	Tekcell SBAA02P, SAFT LS14250 or LST14250.

The logger will operate with other ½AA 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.

Battery Type (XP)	8 x AA 1.5V Alkaline batteries
Replacement Interval	Logging interval and sensor type dependant.
XP Battery Capacity	2500mAh (typical)

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 IP65 rating is valid only when the unit's connector cap and input cable are fitted.

The Reference line is an output from the logger that provides a 2.5V (100µA max) reference voltage for external application, if required.

The 12V line is an output from the logger that changes state when a reading is taken.

This line goes from 0v to +12V, for approximately 8 seconds, before a reading is taken (the line goes back to 0V when the reading cycle is complete).

The Reference line does not need to be connected for the data logger to record correctly.

Using the Re-Educator software, which is supplied on the Tinytag Explorer CD, or can be downloaded free of charge from our web site (http://www.tinytag.info/downloads), the unit can be configured to display recorded data in the appropriate engineering units for the application it is being used in.

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.

Gemini Data Loggers (UK) Ltd. operates a Quality Management System which conforms to BS EN ISO 9001:2000. The scope of the system covers the manufacture, design and supply of data loggers and their associated software, accessories and services.

nqa.
ISO 9001
Registered

CE

data sheet

Required and Related Products

To use this data logger you will also require a cable:

CAB-3239: Tinytag Voltage/XP Input Lead
or a
ACS-9703: 5-Pin Plug

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 PC Serial Download Cable
SER-9540: Tinytag Plus Re-ed XP Service Kit

data sheet