

Tinytag Plus High Sensitivity Shock (0 to 5g)

TGP-0605

Issue 14

21st April 2011
E&OE

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

The TGP-0605 measures low level impacts and can be used for machine condition monitoring and the monitoring expensive and/or fragile shipments.

Popular Applications

- Fragile goods storage and transportation
- Building work monitoring
- Machine condition monitoring



Features

- High sensitivity impact recorder
- 64,000 reading capacity
- User-programmable logging interval
- 2 user-programmable alarms
- Delayed start options
- 3 stop options
- Waterproof case
- User-replaceable battery





Features

Total Reading Capacity	64,000 readings (current product); 16,000 readings (below SN 526338)
Memory type	Non Volatile
Delayed Start	Relative / Absolute (up to 45 days)
Stop Options	When full After n Readings Never (overwrite oldest data)
Reading Types	Maximum
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	0 to 5g (49m/s ²)
Sensor Type	Piezo Electric
Accuracy*	±10% Reading +0.02g (from 0.10g to 5g)
Linearity	±1% Full Scale Deflection
Resolution	0.02g (0.2m/s ²) (from 0.10g to 5g)

*The accuracy figure stated is based on shocks approximated by a half sine wave of length 2ms to 20ms. The logger is less sensitive to shocks either slower or faster than this range.

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	73mm / 2.9"
Depth	68mm / 2.68"
Weight	140g / 4.94oz

*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.

A 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 SAFT LS14250 or LST14250;
Tekcell SBAA02P

The logger will operate with other 1/2AA 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 is fitted and is valid to a depth of 15m (50ft).

The TGP-0605 records the magnitude of acceleration experienced by the unit along the axis running through the logger's lid to its base.

To avoid reading errors the logger must be securely fitted to a flat surface using the unit's two mounting flanges.

This data logger contains sensitive electronics which may be influenced by strong electromagnetic signals. Keep it clear of any sources of electrical interference, especially mobile phones, when logging.

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 Quality and Environmental Management Systems which conform to ISO 9001 and ISO 14001. The scope of these systems covers the design, manufacture and servicing of data logging and associated equipment, including software.



Required and Related Products

To use this data logger you will also require 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-9500: Tinytag Data Logger Service Kit