

Tinytag Plus Re-Ed OEM Current Input Logger (0 to 20mA)

TGPR-0800

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E&OE

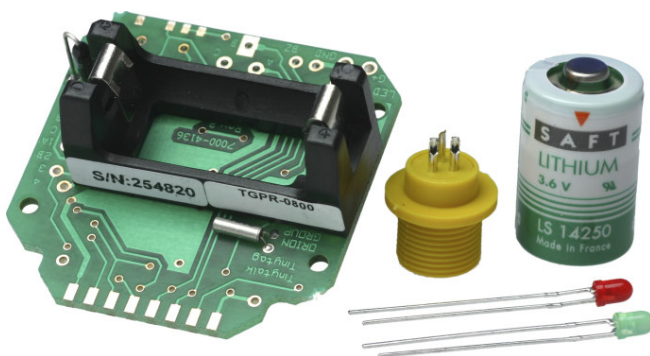
A current input data logger that is supplied un-cased so that it can be built into custom applications.

The TGPR-0800 can be used to record the output from a number of industry standard 4-20mA sensors.

Common applications include pressure and flow rate monitoring.

Popular Applications

- Customised data logging:
 - CO₂
 - Pressure
 - Flow Rate
 - Light
 - Power (with a current clamp)



Features

- Current input data logger
- 64,000 reading capacity
- User-programmable logging interval
- 2 user-programmable alarms
- Delayed start options
- 3 stop options
- User-replaceable battery

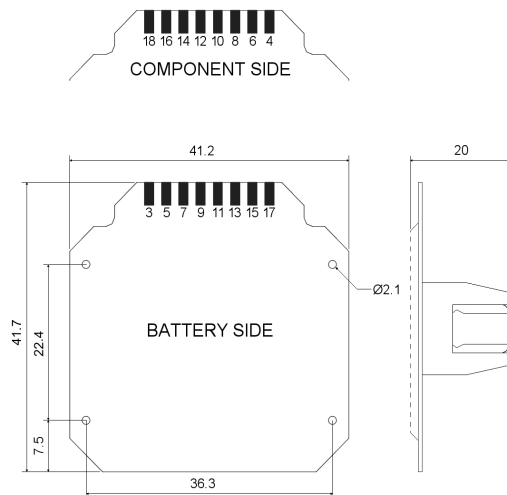




Features

Total Reading Capacity	64,000 readings (current product); 16,000 readings (below SN 501162)
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; latching

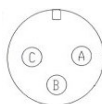
Connection Information



The PCB edge mates with a 0.1" IDC female edge connector, such as RS Part No. 471-317.

Battery Side	Component Side
3: Battery +Ve (3.6V)	4: Do Not Connect
5: Green LED Anode	6: Red LED Anode
7: RS232 Logger Transmit (Tx)	8: Do Not Connect
9: RS232 Logger Receive (Rx)	10: Sense Line*
11: Do Not Connect	12: Reference Line*
13: Do Not Connect	14: Do Not Connect
15: Do Not Connect	16: Do Not Connect
17: Power and Signal GND (0V)	18: Current Signal Input

Communication Socket (supplied) as viewed from behind.



A: RS232 Logger Receive (Rx)
B: RS232 Logger Transmit (Tx)
C: Power and Signal GND (0V)

*See Notes.

Physical Specification

Operational Range* -40 °C to +85 °C (-40 °F to +185 °F)

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

Reading Specification

Range	0 to 20mA DC
Maximum Input	50mA
Input Impedance	10Ω
Resolution	0.08mA
Accuracy	±0.1mA ±0.6% of reading

Notes

Battery Type Tekcell SBAA02P,
SAFT LS14250 or LST14250

The logger will operate with other 1/2AA 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.

A battery and 2 LEDs are supplied, but not fitted to the PCB.

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

The Sense Line is an output from the logger that changes state when a reading is taken.

This line goes from 0v to +3.5V, for approximately 50mS, whilst a reading is being taken (the line goes back to 0V when the reading cycle is complete).

The Sense Line has an impedance of 100KΩ.

The Reference and Sense Lines do 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 (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.

When using the current reading feature in the Tinytag Explorer software, this data logger must not be connected to a mains powered device or a current loop will be created that will damage the unit's input circuit.

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.

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 pieces of software:

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

Further related products:

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