

## Tinytag Plus Re-Ed OEM Count Input Logger (0-255n)

### TGPR-1200

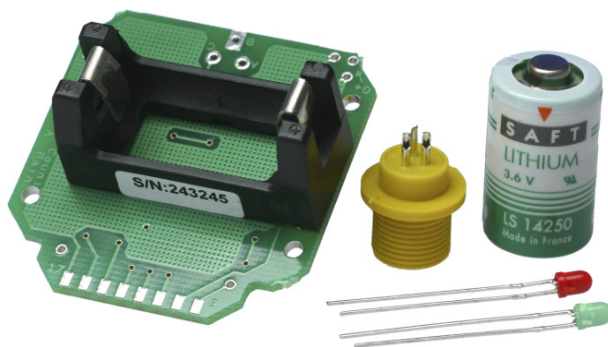
**Issue 15**  
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E&OE

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

Common applications include flow rate and quantity monitoring.

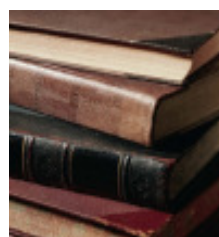
#### Popular Applications

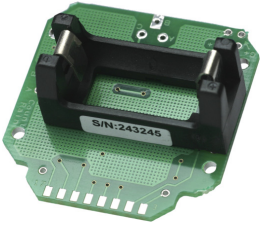
- Flow Rate Monitoring
- People Counting
- Wind Speed
- Rainfall



#### Features

- Count input data logger
- Volt-free contact and digital input
- 64,000 reading capacity
- User-programmable logging interval
- 2 user-programmable alarms
- Delayed start options
- 3 stop options
- User-replaceable battery





### Features

<b>Total Reading Capacity</b>	64,000 readings (current product); 16,000 readings (below SN 515899)
<b>Memory type</b>	Non Volatile
<b>Delayed Start</b>	Relative / Absolute (up to 45 days)
<b>Stop Options</b>	When full After n Readings Never (overwrite oldest data)
<b>Logging Interval</b>	1 sec to 10 days
<b>Offload</b>	While stopped or when logging in minutes mode
<b>Alarms</b>	2 fully programmable; latching

### Reading Specification

<b>Reading Range</b>	0 to 255 Counts/Interval (See Notes)
<b>Maximum Frequency</b>	50 Counts/Second
<b>"Divide by" counter</b>	1 to 255 (See Notes)
<b>Input Type</b>	Digital or Volt-Free Contact Switch
<b>Maximum Error</b>	± Divisor/2 (See Notes)

### Digital Input

<b>Low Level</b>	-0.5V to +1V
<b>High Level</b>	2.5V to 10V
<b>Min. Pulse Width</b>	50µS (at 5V)
<b>Min. Pulse Separation</b>	50µS (at 5V)
<b>Edge Detection</b>	High-Low Transition

### Contact Input

<b>Type</b>	Normally Open (With Minimal De-bounce)
<b>Min. Closed Time</b>	50µS
<b>Min. Open Time</b>	2µS
<b>Edge Detection</b>	Open to Closed

### Notes

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

<b>Recommended Battery Types</b>	SAFT LS14250, Tekcell SBAA02P or Eve ER14250
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The logger will operate with other ½AA 3.6V Lithium batteries but performance cannot be guaranteed.

**Replacement Interval** Every two years

Before replacing the battery the data logger must be stopped.

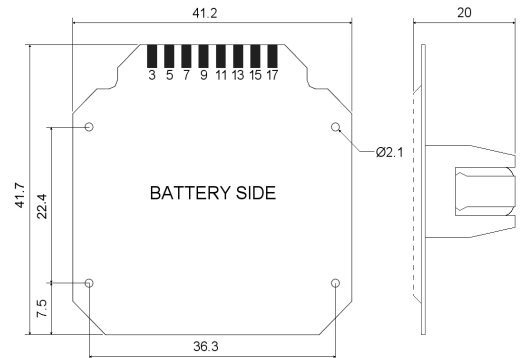
Data stored on the logger will be retained after a battery is replaced.

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

If a volt-free switch is being used that requires further de-bounce, this can be achieved by connecting a 10nF capacitor across the switch contacts.

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. Also, using Re-Educator, a divide by counter - or "divisors" - can be set in the unit to increase the number of counts the logger can record to 65,280 per interval.

### Connections



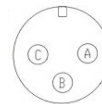
### Battery Side

- 3: Battery +Ve (3.6V)
- 5: Green LED Anode
- 7: RS232 Logger Transmit (Tx)
- 9: RS232 Logger Receive (Rx)
- 11: Do Not Connect
- 13: Do Not Connect
- 15: Do Not Connect
- 17: Power and Signal GND (0V)

### Component Side

- 4: Do Not Connect
- 6: Red LED Anode
- 8: Do Not Connect
- 10: Do Not Connect
- 12: Do Not Connect
- 14: Do Not Connect
- 16: Do Not Connect
- 18: Count 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)

### 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.

### Approvals

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



### Required and Related Products

To use this data logger you will require the following software:

SWCD-0040: Tinytag Explorer software

### Further Related Products

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

The SWCD-0040 software and CAB-0007-USB cable can be ordered together in a pack using the part number SWPK-7-USB.