

## Tinytag Talk 2 Current Logger (0 to 20mA)

### TK-4802

#### Issue 9

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E&OE

Tinytag Talk 2s are compact, lightweight, economical loggers housed in a 35mm film canister.

Supplied with an input cable, this logger can measure current between 0 and 20mA DC and can be connected to many industry standard devices, such as CO<sub>2</sub> sensors and current clamps, enabling the logging of a wide range of process parameters.

The unit is particularly useful when space is at a premium.

#### Popular Applications

- Customised data logging:
  - CO<sub>2</sub>
  - Pressure
  - Flow Rate
  - Light
  - Power (with a current clamp)



#### Features

- Current recorder
- 16,000 reading capacity
- High Accuracy
- High Reading Resolution
- Fast Data Offload
- 2 user-programmable alarms
- Low battery monitor
- User-replaceable battery





### Features

<b>Total Reading Capacity</b>	16,000 readings
<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>Reading Types</b>	Actual, Min, Max
<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>	0-20mA DC*
<b>Maximum Overload</b>	50mA
<b>Maximum Circuit Voltage</b>	30V DC
<b>Input Impedance</b>	75Ω
<b>Resolution</b>	1μA or better
<b>Accuracy</b>	±0.2% of Reading ±10μA
<b>Temperature Stability</b>	0.001mA/°C change from ambient (25°C)

\*The unit will actually continue to read up to 27.5mA DC if required.

### Physical Specification

<b>Ingress Protection</b>	IP30 (not water-proof)
<b>Operational Range</b>	-40°C to +85°C (-40°F to +185°F)
<b>Case Dimensions*</b>	
<b>Diameter</b>	34mm / 1.34"
<b>Height</b>	54mm / 2.13"
<b>Weight*</b>	30g / 1.8oz

\*The Case Dimensions and Weight do not include the supplied CAB-3233.

**CAB-3233 Cable Length** 1.5m / 59.06"

### Connection Information

The Tinytag Talk 2 Current Logger is supplied with a CAB-3233 Talk Voltage/Current Input Lead.

The connection details for the cable, and a 2.5mm jack plug, are as follows:

CAB-3233	2.5mm Jack Plug	Function
Yellow	Ring	Signal Input
Black	Shank	Ground/0V
White	Tip	Sense Line

The Sense line is a signal line that changes state when a reading is taken.

The line goes from 0v to +3.5V, for approximately 85mS, whilst a reading is being taken (the line goes back to 0V when the reading cycle is complete).

The line has an impedance of 100KΩ.

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

### 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.

**Recommended Battery Types** SAFT LS14250,  
Tekcell SBAA02P or  
Eve ER14250

The logger will operate with other 1/2AA 3.6V Lithium batteries but performance cannot be guaranteed.

**Replacement Interval** Annually

Before replacing the battery the data logger must be stopped.

After removing an old battery from a logger, wait five minutes before inserting the new one.

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.

### 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.

### 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 also require:

A CAB-3233: Talk Voltage/Current Input Lead (*supplied*)

The following software:

SWCD-0040: Tinytag Explorer software

and a

CAB-0005-USB: Tinytag Transit/Talk USB Download Cable

The SWCD-0040 software and CAB-0005-USB cable can be ordered together in a pack using the part number SWPK-5-USB.

### Further Related Products

SER-9500: Tinytag Data Logger Service Kit