Excelog One

EALEXELECTRONICS LIMITED

Thermocouple Data Logger and Simulator

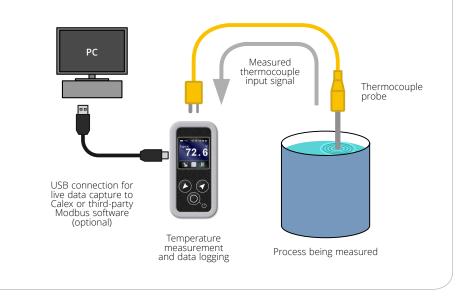


- Dual-function thermocouple data logger and thermocouple voltage output simulator
- Log data to built-in memory
- Simulate a thermocouple voltage for a chosen temperature
- Single channel, configurable for measurement input or thermocouple voltage output
- Free software for configuration and data acquisition
- Built-in USB-rechargeable battery
- Backlit colour display
- Select °C or °F
- Modbus interface for integration into third-party software
- CE Marked and RoHS 2 Compliant

MEASURE MODE



- Connect a thermocouple probe to the Excelog One
- Select the thermocouple type in the menu (Type J, K, T, R, S, N, E)
- Log data to internal memory
- Connect via USB to log data live to a PC
- Transfer data from the Excelog to the PC via the USB connection and software



SIMULATE MODE



- Simulate the output of a thermocouple.
 Use this to check the functionality and calibration of your instrumentation
- Select the thermocouple type in the menu (Type J, K, T, R, S, N, E)
- Connect the Excelog to your instrumentation via a cable and connectors of the matching thermocouple type
- Set the output temperature via the up & down keys



INTUITIVE INTERFACE



GENERAL SPECIFICATIONS

Input 1 x thermocouple input (any of the below types), for use with

miniature thermocouple connectors

Output 1 x simulated thermocouple voltage output (any of the below

types)

Temperature Range Depending on mode and thermocouple type:

Temperature Range		Thermocouple Type
t (Simulated)	(Measured)	
o 1200°C	to 1200°C	Type J
o 1372°C	to 1372°C	Type K
o 400°C	to 400°C	Type T
to 1768°C	1768°C	Type R
to 1768°C	1768°C	Type S
to 1300°C	1300°C	Type N
o 1000°C	to 1000°C	Type E
t	to 1000°C	Type E

Input Accuracy ± 0.1% or 0.8°C, whichever is greater

(Measured)
Output Accuracy

(Simulated)

At 23°C ± 5°C: ± 0.1% or 0.8°C, whichever is greater At 0°C to 50°C: ± 0.25% or 0.8°C, whichever is greater

Temperature Resolution 0.1° for temperatures below 1000° (C or F)

1° for temperatures above 1000° (C or F)

Display 27 x 27 mm colour LCD, backlit

Configurable Parameters Temperature units, mode (measure/simulate), thermocouple

type, cold junction settings, signal processing, date and time,

data logging, power options, languages

Display Language English, Spanish, French, German, Italian, Chinese (simplified),

Japanese

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Display response time Temperatures update every 1 s

Operating Temperature 0 to 50°C

Power Supply Built-in rechargeable Li-ion battery, or USB (cable included)

Battery Life Logging mode: 35 hours (power save enabled)

10 hours with full brightness (typical)

Simulation mode: 32 hours (power save enabled)

Charge Time 3.5 hours
Weight 60 g

Dimensions 78(h) x 38(w) x 15(d) mm

SETTINGS AND FEATURES

- Easy configuration via intuitive menu
- English, Spanish, French, German, Italian, Chinese and Japanese languages
- Measure / simulate mode
- Thermocouple type
- Internal/external cold junction
- Data logging interval, number of samples to log, schedule
- Screen saver timeout
- Firmware updates via USB
- Fully configurable via built-in controls; no additional hardware required







DATA LOGGING SPECIFICATIONS

Logging 1 to 86,400 seconds (1 day) Interval **Data Capacity** 1.5 MB (2 days, logging every second) Variables Measured temperature, cold Logged junction temperature, voltage File Format .csv (can be imported to Excel) Configurable Sample period, number of samples, scheduled start date/ **Parameters** time (or manual start/stop)

DIMENSIONS & CONNECTIONS Actual size Rubber boot Socket for mini thermocouple connector: Input (for measurement & logging) Output (for thermocouple simulation) Wrist strap attachment USB Micro B for charging, configuration and real-time logging to PC 78 Push button controls: Up / Down / Left / Right Select / On/Off (hold) **←** 15 → - 38 -

MODEL NUMBERS

EXCELOG-ONE Data logger and thermocouple simulator with USB

cable

ACCESSORIES

EL1-MAU Spare international mains adapter

EL1-CALCERTA Calibration certificate, UKAS traceable

SOFTWARE

EXCELOG · Temperature display

· Logging of live temperature data direct to PC

• File format: Comma-separated text file (compatible with Excel)

· Scrolling temperature chart

Configuration of Excelog One settings

Free download at <u>www.calex.co.uk/software</u>

OTHER Also compatible with third-party Modbus software

