# Excelog 6

6-channel temperature data logger
with touch screen




Operator's Guide

CALEX
ELECTRONICS LIMITED

Inputs

4 x thermocouple inputs (any of the following types), for use with miniature thermocouple connectors, plus 2 x RTD inputs, spring clamp, for 2-wire or 3-wire RTDs, 28 to 16 AWG

| Input Type | Temperature Range | Accuracy of Excelog only (whichever is greater) |
|---|---|---|
| Type J | -200°C to 1200°C | ± 0.1% or 0.8°C |
| Type K | -200°C to 1372°C | ± 0.1% or 0.8°C |
| Type T | -200°C to 400°C | ± 0.1% or 0.8°C |
| Type R | 0°C to 1768°C | ± 0.1% or 0.8°C |
| Type S | 0°C to 1768°C | ± 0.1% or 0.8°C |
| Type N | 0°C to 1300°C | ± 0.1% or 0.8°C |
| Type E | -200°C to 1000°C | ± 0.1% or 0.8°C |
| Pt100, Pt200, Pt500, Pt1000 | -200°C to 850°C | ± 1.0% or 1.0°C |

**General Specifications**

| | |
|---|---|
| Temperature Resolution | 0.1° for temperatures below 1000° (C or F)<br>1° for temperatures above 1000° (C or F) |
| Display | 2.83" (72 mm) resistive touch TFT, 320 x 240 pixels, backlit |
| Configurable Parameters | Temperature units, alarms, signal processing, date and time, data logging, power options, graph channels |
| Temperature Units | °F or °C |
| Alarm Configuration | 12 x visual alarms (2 per channel) with adjustable level, individually configurable HI or LO. |
| Signal Processing | Average, minimum, maximum, standard deviation, 2-channel difference |
| Display Response Time | 1 s |
| Operating Temperature | 0 to 50°C (0 to 40°C for battery charging) |
| Power Supply | Built-in rechargeable Li-ion battery, or USB, or 5 V DC mains adapter (included) |
| Battery Life (Typical) | 32 hours while logging with full display brightness<br>Up to 96 hours while logging in power saving mode |
| Charge Time | 6 hours (using mains adapter) |
| Weight | 200 g without thermocouples |
| Dimensions | 136(w) x 71(h) x 32(d) mm, without thermocouples |

**Data Logging Specifications**

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|---|---|
| Data Logging Interval | 1 to 86,400 seconds (1 day) |
| Max. SD Card Capacity | 32 GB SD or SDHC (4 GB SD Card included - approx 2 years of data) |
| Variables Logged | Measured temperature, cold junction temperature, alarm events |
| File Format | .csv (can be imported to Excel) |
| Configurable Parameters | Sample rate, number of samples, scheduled start date/time, (or manual start/stop) |

**PC interface**

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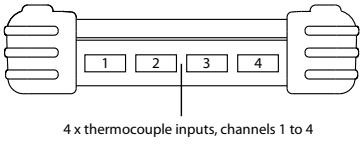
|---|---|
| Windows Software | Free download from www.calex.co.uk/software |
| Communication protocol | Modbus (address table available separately) |

Top

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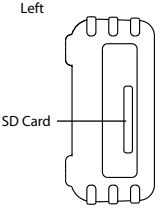
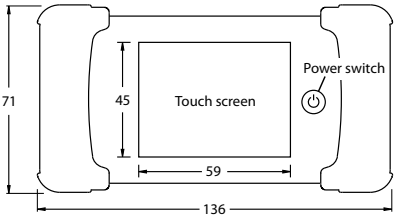



Front

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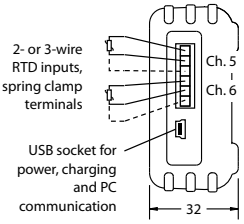


## ⚠ Warning

This device has an internal, non-removable, rechargeable Lithium-Ion Polymer battery. Do not attempt to remove or replace the battery as this could cause damage and will invalidate the warranty. Do not attempt to charge the battery in ambient temperatures outside of the range 0°C to 40°C (32°F to 104°F). Do not dispose of batteries in a fire as they may explode. Dispose of batteries according to local regulations. Do not dispose as household waste. Improper use or use of unapproved chargers may present a risk of fire, explosion, or other hazard, and will invalidate the warranty. Never use a damaged charger. Only use the charger indoors.

Refer to this instruction sheet when the warning symbol ( ⚠ ) is encountered.

To avoid the possibility of electric shock or personal injury:

- Before using the thermometer, inspect the case. Do not use the thermometer if it appears damaged. Look for cracks or missing plastic;
- Do not apply a voltage between any terminal and earth ground while the USB is connected;
- To prevent damage, do not apply more than 1V between any two input terminals;
- Do not use the instrument around explosive gas, vapour or dust.

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|---|---|
| EXCELOG-6 | 6-channel handheld temperature data logger with 4 GB SD Card, 5 V DC mains adapter, and USB cable |

Accessories

| | |
|---|---|
| ELMAU | Spare USB mains adapter |
| ELSD | Spare 4 GB SD Card |

## Guarantee

Calex guarantees each instrument to be free from defect in material and workmanship under normal use and service for the period of one year from the date of purchase. This guarantee extends only to the original buyer.

# Excelog 6 Touch Screen Interface

