

CALOG - LC II

Hand-Held Loadcell Display/Tester/Calibrator



The *CALOG - LC II* is a portable, multi-function, precision instrument for strain gauge loadcell system testing and calibration. This model now includes the powerful ARM processor, a display function (ideal for portable scales or field readings), an SD card for datalogging, a USB port for connection to a computer for certificates or spreadsheets and longer lasting Lithium-Ion battery pack. Supplied complete with carrying case, charger and leads.

DISPLAY: mass, force, strain or torque from loadcells. Set mV/V, range, decimal points and units. Zero and span trim available. Selections for tare, peak hold and auto zero maintenance. Can be used for one 350 Ohm or three 1000 Ohm loadcells.

TEST LOADCELL: connect the loadcell leads to spring terminals and select test to get a readout of 4 or 6-wire, zero balance, input and output resistance and bridge balance. This is an ideal, time saving way to field test individual loadcells in position.

INSULATION TEST: connect leads to screen, housing and gauge to get a 50V insulation test between each in megohms. This test will show up water ingress that can cause loadcell measurement errors.

MEASURE: high accuracy measurement of millivolts with a secondary display of excitation voltage and milliamps for loadcell systems. Use this function to compare the actual loadcell readings with amplifier outputs or display readings for fault finding.

SOURCE: high accuracy millivolt injection with display of excitation voltage and mA output for workshop or field calibration of amplifiers and indicators.

SIMULATE: for sourcing milliamps into remote displays or SCADA systems. The *CALOG - LC II* display can be in mA or mass equivalent.

SETTINGS: allows you to set up the unit for power savings, contrast, language options and technical access.

HELP: gives you connection diagrams for each application, like having a built-in manual.



CALOG Calibrators

The *CALOG* range of process instrumentation calibrators are designed for servicing, repairs in the workshop and the plant environment. They are tough, sophisticated precision instruments that are portable, compact and user-friendly.

Robust enough to withstand the rigors of most industrial environments, they are powered by long-life lithium ion batteries and incorporate a clear, back-lit LCD graphic display.

For quick source value set-up, the *CALOG* uses the “key-per-digit” numeric setting feature that enables the user to scroll each digit up or down.

Features

- Small, rugged, handheld with a protective rubber cover.
- Graphic display of measured value and battery status
- Datalogging with SD Card and downloaded to a PC via on board USB port
- Programmable auto-off and selectable date and time
- Lithium Ion Battery pack, charger, carry case, and test leads supplied as standard
- 1 year guarantee against faulty material or workmanship (Batteries not included)

Measuring

| ANALOGUE INPUT RANGES | RANGE | IMPEDANCE | ERROR LIMITS | RESOLUTION |
|------------------------------|----------------------|-------------------|--------------|--------------|
| LC Display | -5 to 35 mV | min 300 Ω | 0.005% FS | 5 Digit |
| Bridge balance | -5 to 10 mV/V | >1 M Ω | 0.02 mV/V | 0.001 mV/V |
| Resistance | 0 to 2000 Ω | | 0.03% FS | 0.1 Ω |
| Millivolt | -5 to 35 mV | >1 M Ω | 0.005% FS | 0.001 mV |
| Voltage | 0 to 20 V | >110 k Ω | 0.005% FS | 0.001 V |
| Current (Isolated, max 100V) | 0 to 24 mA | \pm 17 Ω | 0.01% FS | 0.001 mA |
| Insulation (50V) | 0 to 1000 M Ω | | 5% FS | 1 M Ω |

Sourcing

| RANGES | RANGE | IMPEDANCE | ERROR LIMITS | RESOLUTION |
|------------|-------------|------------------|--------------|------------|
| Millivolts | -5 to 35 mV | min 500 Ω | 0.005% FS | 0.001 mV |
| Milliamps | 0 to 24 mA | max 600 Ω | 0.01% FS | 0.001 mA |

Environmental

- Operating temperature range 0 to +30°C
- Storage temperature range -20 to +55°C
- Humidity < 85% non-condensing

Mechanical Specifications

- Dimensions (with the boot on) 86 x 155 x 43mm, IP54 rating (dust and splash proof)
- Dimensions (without the boot) 77 x 145 x 34mm, IP54 rating (dust and splash proof)
- Protection UL 94 V-0 flame retardant ABS plastic with rubber boot
- Weight 340g

General Specifications

| | |
|------------------|---|
| Display | 128 x 64 graphics display with back-lit LCD |
| Keypad | 16 Key embossed buttons |
| Battery | Lithium Ion with temperature sensing |
| Battery run life | Approx. 8 Hours, loop power off Approx 4 Hours, loop power on Approx 4 Hours, in display mode Continuous with charger in |

Error messages

- Over range ^^^^ with audible warning
- Under range vvvv with audible warning
- mA loop error “loop error” with audible warning
- mA loop ohms too high “check loop Ω ” with audible warning