

# The Ultimate Load Cell Tester Model LCT-Ultimate

The **LCT-Ultimate** is a stand-alone hand-held device that was especially designed for full troubleshooting of strain-gage based load cells.

The **LCT-Ultimate** can check all common types of standard load cells that are available in the market: 4 or 6 wires @ all rated gain outputs.

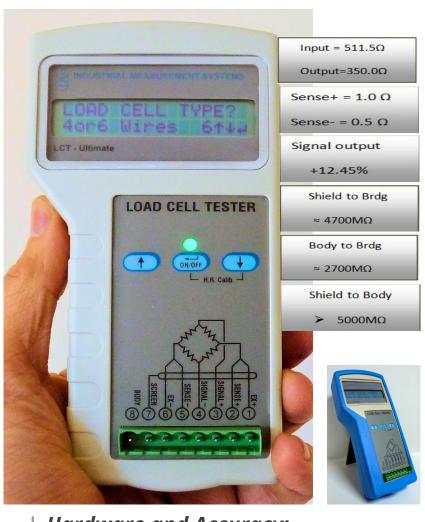
It provides the user with all essential data needed about the tested load-cell: bridge resistance and integrity, physical distortion (possibly caused by overload, shock load or metal fatigue) and checks the insulation resistance that can point to moisture or chemical ingress.

#### Main Features:

- Fast testing of load cells and scales.
- Can be used to check multi load-cell scale alignment.
- Continuous signal reading allows checking linearity and repeatability. (Input resistance >  $175 \Omega$
- Very friendly, full test takes only 5 seconds.

## **Specifications:**

- Input and Output resistance: up to 1250  $\Omega$ at  $0.5 \Omega$  resolution.
- Sense resistance (for 6 wire L/C): up to 500  $\Omega$ at 0.1  $\Omega$  resolution.
- Insulation resistance: measurement range  $10~M\Omega$  --  $5000~M\Omega$ .
- Load cell output in percentage of full scale: ±250% at 0.01% resolution (input resistance  $> 175 \Omega$ ).
- Gain adjustment: 0.1-5mv/V steps of 0.01.



## Hardware and Accuracy:

- Bridge testing: 1.25Vdc.
- High resistance testing: 10Vdc.
- A/D resolution: 16bit.
- Resistance accuracy:  $\pm$  0.5  $\Omega$ .
- *High-resistance accuracy: ±10%.*
- Load Cell output accuracy: 0.1%.

#### General:

- Power source: 4 AA batteries (Not supplied).
- Connector: 8 pin screw terminal (supplied with the unit).
- Enclosure material: ABS.
- Display: 16X2 alphanumeric.
- *Size: 150mm x 80mm x 28mm.*
- Weight: 250gr.



**Industrial Measurement Systems Ltd.** 



