WEIGHING SOLUTIONS



LCT-Ultimate Load Cell Tester



The **LCT-Ultimate** is the most comprehensive testing device for load cells. This easy to use, hand-held device enables the scale user or technician to trouble-shoot his weighing system on-site. Within seconds the LCT-Ultimate provides a clear answer to any doubts, or satisfies the operator that his load cell is faultless.

The LCT-Ultimate is capable of identifying just about any defect in all common analog types of strain-gaugebased load cells. As a user, you quickly receive all essential data you need to evaluate the load cell, such as bridge resistances (input and output resistance) and load cell output (as an indication of mechanical damage, e. g. due to overload, shock load, overvoltage or metal fatigue) as well as the insulation resistance to the screen and/or to the body. A reduced insulation resistance can point to damage caused by moisture or chemical ingress.

Measurement capabilities / Technical data

- Test of the measuring bridge with 1.25 V DC, insulation test/high resistance test with 10 V DC
- Measurement of input and output resistances: up to 5 kΩ at 0.5 Ω resolution, ± 0.5 Ω accuracy
- Sense resistance (for 6-wire load cells): up to 500 Ω at 0.1 Ω resolution
- Insulation resistance: 10 M Ω up to 5000 M Ω at ± 10% accuracy
- Load cell output in percentage of full scale: ± 250% at 0.01% resolution, 0.1% accuracy (input resistance > 175 Ω)
- Gain adjustment (load cell output test range in contin. mode): 0.1 ... 5 mV/V in steps of 0.01
- 16-bit A/D converter
- 8-pin connector with screw terminals (supplied with the unit)
- Uses 4 standard batteries type AA (not supplied)

Functions and Features

- Fast testing of strain gauge load cells and complete scales
- Comprehensive test result of all load cell parameters
- Enables checking of load cell utilization and load distribution in scales with multiple load cells
- Continuous signal reading mode and display allows to check the linearity and repeatability
- Insulation resistance measurement up to 5 GΩ
- Very user-friendly operation, the complete test takes only 5 seconds
- 2-line alphanumeric display with 16 characters each, backlit
- Rugged ABS enclosure, with protective sleeve and stand-up bracket
- Size (mm): 150 x 80 x 28; Weight: 250 g