

# ADVANCED DIGITAL LCR METER

## EDC-1630



Model **EDC-1630** is a high-class digital LCR meter which displays menus and parameter values on a large LCD (100×77mm). This is a multi-functional measurement mode LCR meter which is capable of measuring, with 0.02% accuracy, not only the general LCR but also the LR and CR circuit impedance characteristics. This equipment sets the deviation range up to 14 grades and automatically separates measured parts (LCR) by the BIN numbers so that the equipment can be used for the LCR mass production line or for subdivided parts inspection. In addition to such function, the equipment measures the absolute deviation values with respect to the standard values and indicates deviation values (%), at the same time measuring the average values based on repeated measurements, reducing measurement errors at an equal level.

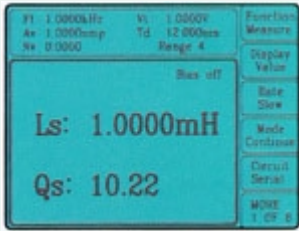
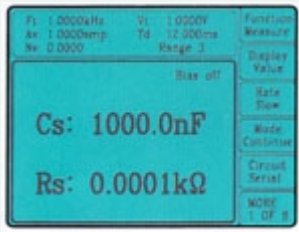
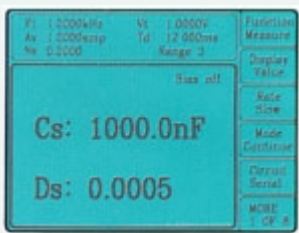
Model EDC-1630 controls the BIN numbers of the measured data and the measurement start signals by remote control system using the handler interface function, and also can effect GPIB (IEEE-488) interface (option).

### ■ FEATURE

- Displays measured deviation value and deviation rate (%) with respect to the designated standard values.
- Displays automatic BIN numbers by optional setting according to the measured deviation rate.
- If the D/Q ppm key on menu-2 is used, resolution is obtained for even the ppm of D or Q.
- If the # Average key on menu-3 is used, the number of measurements can be set up to 2~255 times to display the average values.
- The system features handler interface function capable of controlling the BIN numbers and the measurement start signal of the measured data by means of remote control system.
- GPIB interface (option) can be provided to transmit measured data to computers for processing.
- The system carries a function which removes the stray capacity of the interface terminals or the line resistance offset prior to starting measurement.\



◆ L and C measurement on measurement menu (example)

	<p><b>Inductance measurement:</b> Displays general L (Inductance Value) and L's Q (quality factor) value.</p>
	<p><b>Capacitance measurement I:</b> Displays general C (Capacitance value) and R value contained in C.</p>
	<p><b>Capacitance measurement II:</b> Displays general C (Capacitance value) and C's D (Dissipation factor) value.</p>

■ Technical Specification

<b>Measurements</b>	Q and Inductance (L) / D and Capacitance (C) / Resistance
<b>Display</b>	One of below on the 320×240dots graphic LCD with back Light. * Measured Value : 5digit for LCR and 4digit for D, Q * %difference 0.0001% ~ 99.999% * LCR difference : 0.00001 ~ 99999 * BIN Number : Number of 14 different error limit group
<b>Measuring Frequency</b>	12Hz ~ 100kHz
<b>Measuring Voltage</b>	5mV ~ 1.275Vrms
<b>Range</b>	4ranges (Auto or Manual, Setting)
<b>Circuit Modes</b>	Parallel, Series
<b>L Measurement</b>	0.01 μ H ~ 99999H(in 4 ranges)
<b>C Measurement</b>	0.01pF ~ 99999 μ F(in 4 ranges)
<b>R Measurement</b>	1mΩ ~ 99999kΩ(in 4 ranges)
<b>Q (with L)</b>	0.001 ~ 1000
<b>D (with C)</b>	0.001 ~ 1000
<b>Accuracy</b>	L : 0.02%(20 μ H ~ 2000H) / C : 0.02%(10pF ~ 1000 μ F) R : 0.02%(10Ω ~ 400kΩ) Q : 0.0001 + 0.0001(1 +   Q   + Q2) D : 0.0001 + 0.0001(1 +   D   + D2)
<b>DC Bias (Ext.)</b>	60V/200mA Max.
<b>Operating condition</b>	0°C ~ 50°C, 85% RH or Less
<b>Input Power</b>	AC 110/220V, 50/60Hz
<b>Dimensions &amp; Weight</b>	340(W)×120(H)×414(D)mm / kg(Approx.)

**STANDARD ACCESSORIES :**

- RF Input Cable: 1ea
- Test Clip (TC-1630) : 1ea
- AC Power Cable : 1ea
- Operation Manual: 1ea

**Option**

- Text Fixture (TF-1630)
- GPIB & Handler Interface Board