

## 特点

- 连续测试频率
- 自动调平控制
- 紧凑型
- dcr 测量
- 粮箱功能

## RS Pro - 6100 台式 lcr 表 **9999.99mf 、 99.9999MΩ μ h 、 9999.99h**

RS 号: 117-6716



RS 认证产品为您提供所有产品类别的专业品质部件。我们的产品系列经过工程师测试、提供与领先品牌相当的质量、而无需支付高昂的价格。

## lcr 表

## 商品描述属性

RS Pro 6000 系列仪表具有 0.05% 基本精确度、紧凑型尺寸（2U 半机架）和大型（3.5 英寸）彩色 LCD。通过在屏幕上同时显示不仅设定标准和测量结果、而且还有两个额外的监测参数、可提高测量效率。测量结果包括通过 / 失败显示、用于快速验证。操作员可以在模型范围内自由更改频率、因此可以节省重复归零操作的时间和麻烦。此外还随附安全说明说、电源线、测试夹 LCR-06A 和 CD。（用户手册、PC 软件）

## 一般规格

型号	LCR-6100
类型	工作台
组件类型	电感器、电容器、电阻器
测量参数	c/l/r/g/b/y/d/q / θ /dcr
测试模式	串联 / 并联
测试频率	10Hz 至 100kHz
输出阻抗	30Ω / 50Ω / 100Ω 可选
基本精确度	0.05%
测试速度	快速： 25ms / med : 100ms / 慢速： 333ms
直流偏置	内部 ±2.5V (0.5% + 0.005V)
粮箱功能	比较器 (9BIN、辅助：1BIN)
内存	10000 个数据点
显示类型	3.5 英寸液晶屏
自动量程	是的
数据保持	是的
自动关闭电源时间	是的
- 低电池电量指示器	是的
过载指示	是的
接口	usb / rs-232

## 显示范围

参数	范围
r、x、 z	0.00001Ω ° 至 99.9999MΩ °
g、b、 y	0.01ns 至 999.999s
L	0.00001mh 至 9999.99h
C.	0.00001pf 至 9999.99mf
D	0.00001 至 9.99999
问	0.00001 至 99999.9
θd	-179.999° 至 179.999°
θr	-3.14159 至 3.14159
dcr	0.00001Ω ° 至 99.9999MΩ °
Δ%	-99999% ~ 99999%

## 测试信号测量

交流	
级别	10.00mv 至 2.00v
电平精确度	10%
输出阻抗	100Ω μ a (标称)
频率	10Hz 至 2kHz
	0.01hz ( 100Hz 至 120Hz )
分辨率	0.1Hz (1KHz)
	1Hz (10kHz)
	10Hz (100.0kHz)
频率精确度	± 0.01%
dc	
液位范围	1V 直流
电平精确度	5%
输出阻抗	100Ω μ a (标称)

## 电气规格

电源	电源
随附电池	否

## 机械规格

尺寸	265mm x 312mm x 107mm
长度	265mm
宽度	312mm
高度	107mm
重量	3kg

## 操作环境规格

工作湿度	相对湿度高达 70% (右侧)
工作温度	0°C 至 50°C

## 认证

合规性 / 认证	en 61340
声明	rohs 合规性证书



## A. Consecutive Frequency and Convenient Zero Function



Consecutive and Adjustable Frequency Selectable Fixture Zeroing Methods  
Selectable Fixture Zeroing Methods  
Frequency Within Provided Full Frequency Range Zero or Spot Zero  
Frequency Range

The LCR-6000 series, within the provided frequency range, features consecutive and adjustable frequency capability which allows users to conduct measurement and analysis on components with the most genuine frequency requirements. For OPEN/SHORT fixture compensation function, the LCR-6000 series is equipped with full frequency range zero and spot zero selections. After executing full frequency range zero, users, under the conditions of not turning off the power and not changing test fixture, can freely change test frequency for the LCR-6000 series to execute component measurements that tremendously saves time in repeatedly zeroing test fixture after changing frequency.



OPEN TEST ON  
SHORT TEST ON  
SPOT 1,000 kHz

## B. Rich and Diverse Information Display



MEAS Display  
Parameter Setting and Four Measurement Parameters



ENLARGE Display  
Enlarge Measurement Results and Include PASS/FAIL Judgment

The measurement result display of the LCR-6000 series not only reveals major and secondary measurement parameters but also includes two monitoring parameters. Therefore, four DUT related parameters can be simultaneously shown on the display screen to save time if repeated measurements are required. With respect to display screen, the LCR-6000 series features diverse display to meet users' observation requirements. For instance, MEAS display shows setting parameters and measurement results at the same time; ENLARGE display focuses on measurement results and PASS/FAIL judgment is available, which is conducive to assist engineers to swiftly obtain the validity of measurement results.

## C. Diverse Ancillary Measurement Functions



Automatic Level Control  
Ideal for Measuring Components  
With Voltage Requirements



Internal Bias ( $\pm 2.5V$  Adjustable)  
Ideal for Capacitive Components'  
Characteristic Tests

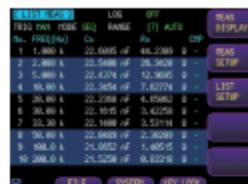


D.C. Resistance Measurement  
Ideal for inductive components' D.C.  
Characteristics Verification

To satisfy the diverse measurement application requirements for different components and materials, the LCR-6000 series collocates with many auxiliary measurement functions. For capacitor measurement, Automatic Level Control (ALC) is mainly for component which requires a constant or rated test voltage such as multi-layer ceramic capacitor (MLCC). An internal D.C. bias voltage ( $\pm 2.5V$ , internal) is allowing simulating A.C. and D.C.

coexistence to learn capacitance variation. For inductor measurement, the D.C. resistance measurement function is to validate D.C. resistance characteristics. Additional, the LCZ function is to quickly identify components' characteristics. When the function is activated, the LCR-6000 series will automatically determine DUT's characteristics and reveal the optimum parameters to show the measurement results.

## D. 10 Points Listed Tests and PC Software



Listed Tests

Variation Criteria Based Upon  
Frequency or Voltage/Current



On Software - Characteristic Curve  
Provide More Delicate Characteristic Variation Trend

The LCR-6000 series provides the 10 points listed test function, which allows users to define a set of DUT measurement parameters (such as Cs-Rs) and to set 10 test criteria of category (either by frequency or by voltage or by current) but different values to conduct measurements. Through this function, users can rapidly and clearly obtain DUT's characteristic variation trend to determine the adaptability of DUT's practical applications. The measurement results can be recorded directly in the internal memory and be transferred to the PC through USB. The LCR-6000 series also provides free PC software (maximum 1,000 points listed tests) in order to satisfy users' analytical requirements on delicate variation.

## E. Standard Interface



Standard Interface

For interface connectivity, the LCR-6000 series comes equipped with Handler interface and RS-232C interface. Handler outputs 10 BIN (9BIN, AUX: 1BIN) sorting results that is best for external connection control, for instance, connecting to a sorting machine to conduct components' sorting operation. RS-232C is suitable for remote control and measurement results retrieval. The PC gives commands to control settings or to read measurement results so as to achieve the requirements of verifying automotive applications.



#### OPTIONAL ACCESSORIES

<b>6666445</b> LCR-06B	Kelvin Clip Test Lead
<b>6666457</b> LCR-07	Test Fixture, Two-Wire with Alligator Clips
<b>5136081</b> LCR-08	Test Fixture (Tweezers) for SMD/Chip Components

#### ORDERING INFORMATION

<b>LCR-6300</b>	10Hz ~ 300kHz Precision LCR Meter
<b>LCR-6200</b>	10Hz ~ 200kHz Precision LCR Meter
<b>LCR-6100</b>	10Hz ~ 100kHz Precision LCR Meter
<b>LCR-6020</b>	10Hz ~ 20kHz Precision LCR Meter
<b>LCR-6002</b>	10Hz ~ 2kHz Precision LCR Meter

#### ACCESSORIES

Safety Sheet x 1, Power Cord x 1, Test Fixture LCR-06A x 1, CD x 1 (User manual/PC software)



RS Pro 6000 系列提供 5 种型号、具有不同的测试频率：2 khz、lcr -6002、[117-6718.](#)；20 khz，lcr -6020，[117-6717.](#)；100 khz、lcr -6100、[117-6716.](#)；200 khz，lcr 6200，[117-6715.](#)；300 khz，lcr -6300，[117-6714.](#))