

GPS-

# 3131C

A benchtop LCR meter to meet your impedance measurement needs in the field of R&D, production, quality assurance, or incoming inspection

This series desktop bridge incorporates 3.5-inch TFT display, user-friendly interface, and a variety of measurement parameters into one body. It is convenient for users to carry out remote control with RS232 and also perform the sorting of components using handle. In function, it can not only adjust the output frequency and test level, but also record the value of components in the process of measurement. In the performance parameters, its basic accuracy reaches 0.2%.

The compacted 3131C with abundant features is absolutely the economical solution tool for R&D, production test, IQC, etc. on implementing each test stages for passive components.



## Key Features

- Measurement frequency up to 20kHz
- Test level 100 ~ 2000mV
- Support the measurement of DC resistance and electrolytic capacitor
- Internal bias voltage output (1mV-1500mV)
- Automatic identification of component measurement
- 3.5-inch TFT display, 5 and a half bits display (with adjustable backlight)
- USB, RS232 communication interface, Handler sorting
- Data recorder function (MAX/MIN/AVG/TOL%/HOLD/LIST/COMPARISON)
- Support SCPI communication protocol
- Manual and automatic range
- Be equipped with open circuit and short circuit correction
- Comparator has sorting and alarm function
- Provides a variety of test ports
- User-adaptable system settings

[www.gpslimited.com/3131C](http://www.gpslimited.com/3131C)  
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## Technical Specifications

GPS-3131C Benchtop LCR Meter	
Digits	Main parameter: 5 digits; secondary parameter: 5 digits
Measurement Parameter	Main parameter: L/C/R/Z; secondary parameter: X/D/Q/θ/ESR
Measurement Range(L)	0.01μH - 9999H
Measurement Range(C)	0.01pF - 99999μF
Measurement Range(R/Z/X)	0.0001Ω - 99.99MΩ
Measurement Range(D/Q)	0.0001 - 99999
Measurement Range( θ )	-180.000deg - 180.000deg
Measurement Range(ESR)	0.0001Ω- 99.99MΩ
DCR Measurement	Range 0.000Ω ~ 99.99 MΩ
Basic Accuracy	0.2%
Test Frequency (Hz)	12points (100、120、200、400、800、1k、2k、4k、8k、10k、15k、20k)
Measurement Display Speed	2 times/second (slow), 4 times/second (medium speed), 8 times/sec (fast)
Internal Bias	0-1500mV adjustable, 1mV stepping
Test Level	100mV、300mV、600mV、1000mV、1500mV、2000mV
Correction Function	Open circuit correction, short circuit correction
Screening Function	The screening limit can be set from -50% to + 50% with fixed points of 1%, 5%, 10% and 20%
Selection of comparator	Five gear sorting, third gear qualified, one gear failed, one ancillary gear
Communication Interface	Standard configuration: USB, RS232 (or 485), Handler interface; Optional: GPIB, USB Host

### Standard Accessories

Test cable  
AC power cord

### Power Supply

220V AC ± 10%, or 110V AC ± 10%, 45-65Hz

### Power Consumption

<20W

## General Specifications

Part Numbers / Optional Accessories		
Code	Item	Part Number
GPS-3131C	Benchtop LCR meter 10hz ~ 20kHz (12 points), 0.2% accuracy	500101

### Mass

2.3kg/5lbs approx.

### Dimension

265(L)×105(W)×305(H) mm

### Operating

0 ~ 40 °C, relative humidity <80%

### Storage

-10 ~ 50 °C, relative humidity <80%

### Services

1-year warranty (subject to product registration with GPS Ltd)

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