

GPS

# 313XC series

Power and precision benchtop LCR meters with a range of frequencies available

The newly upgraded 313XC series adopts true color TFT-LCD display and full operation interface displayed in large fonts making readings more intuitive. Ideal for laboratory quality control, feed inspection and component sorting. The series can test the 4 parameters of the component at the same time. Each parameter can be arbitrarily configured.

The newly improved instrument realizes a full 6-digit display of the main and auxiliary four parameters. It can scan 10 kinds of frequencies or level lists, and also be used for 3 groups of user frequencies. With a built-in comparator, through the HANDLER interface, combined with PLC will completely automate sorting of components. Also, comes with built-in RS232 / RS485 / USB interfaces (GPIB optional) and SCPI / Modbus support.



## Key Features

- True colour TFT-LCD display
- DCR measurement and internal DC BIAS ( $\pm 2.5V$ )
- Store 999 LCD screen files, trigger delay, automatic level control (ALC)
- Full-scale correction function frequency calibration
- Enhanced comparator (sorting) function: Programmable P1~P9 nine-segment sorting
- Absolute deviation (ABS) comparison mode, relative deviation (PER) and order (SEQ) comparison
- Switchable accessory file (AUX) sorting
- Custom sorting results are audible
- 1000V super shock protection

## Ideal for

- Passive component troubleshooting
- Electronic assembly
- Quality control (component sorting)

## Technical Specifications

Model		GPS-3135C	GPS-3138C	GPS-3139C
Test Signal Frequency		continuous frequency point of 10Hz~100kHz with a resolution of 0.001Hz	continuous frequency point of 10Hz~200kHz with a resolution of 0.001Hz	continuous frequency point of 10Hz~300kHz with a resolution of 0.001Hz
Measurement Range	L	0.00001 $\mu$ H ~ 9999,99H		
	C	0.00001pF ~ 9999.99mF		
	R, X, Z	0.00001 $\Omega$ ~ 99.9999M $\Omega$		
	B, G	0.01nS ~ 999.999S		
	D	0.00001 ~ 9.99999		
	Q	0.00001 ~ 99999.9		
	$\theta$ d	-179.999° ~ 179.999°		
	$\theta$ r	-3.14159 ~ 3.14159		
	DCR	0.00001 $\Omega$ ~ 99.9999M $\Omega$		
Test Signal Level		(continuous) 0.01V ~ 2.00Vrms, 0.01V resolution Test signal accuracy: $\pm$ (10% + 10mV)		
Output Impedance		30 $\Omega$ , 50 $\Omega$ and 100 $\Omega$ , Accuracy: 5%		
Test Function		Cs-Rs, Cs-D, Cp-Rp, Cp-D, Lp-Rp, Lp-Q, LS-Rs, Ls-Q, G-B, R-X, Z- $\theta$ rad, z- $\theta$ deg, DCR		
Accuracy		SLOW/MED: 0.05%; FAST: 0.1%		
Equivalent Circuit		Series and Parallel		
Measurement Range		Auto, Hold and Nominal range. Total 9 ranges.		
Display Max		6-digit, principal parameter: 999999; sub parameters: 999999; monitor parameters: 999999		
Comparator		14-bin sorting, 10-bin GD, 1-bin NC, AUX, 2-bin principal parameter NG count function: Max - 999999		
Measurement Speed		40 times/s, 10 times/s, 3 times/s		
Trigger Mode		Internal, Manual, External and Bus		

### Standard Accessories

Test leads/Test fixture  
Kelvin Test Clip  
SMD Test Clip (optional for 3135C)  
Short-circuit slice  
RS232 communication cable  
SCPI instruction set

### Power Supply

AC 100V-240V, 50Hz-60Hz

### Power

Max 20VA

## General Specifications

Code	Item			Part Number
GPS-3135C	Benchtop LCR Meter	50Hz~100kHz (cont.)	Accuracy: 0.05%	510150
GPS-3138C	Benchtop LCR Meter	50Hz~200kHz (continuous)	Accuracy: 0.05%	510283
GPS-3139C	Benchtop LCR Meter	10Hz~300kHz (continuous)	Accuracy: 0.05%	510933

### Dimensions

264 x 350 x 107mm / 10 x 14 x 4.2" (w x d x h) approx.

### Mass

4.0kg/8.5lbs approx.

### Operating

10°C ~ 40°C  
85%RH, 40°C, 24hours  
 $\leq$ 3000m

### Services

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

Visit [www.gpslimited.com/register-product](http://www.gpslimited.com/register-product)

Please contact for more information

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