## GPS LTD.

# <sup>GPS-</sup> 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. Test signal can be adjusted with super accurate precision (0.001Hz resolution).

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 (±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 ninesegment 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)

www.gpslimited.com/313XC For all enquiries, Tel: +44 (0) 208 964 3600 Email: info@gpslimited.com

### **Technical Specifications**

Model		GPS-3135C	GPS-3138C	GPS-3139C		
Test Signal Frequency		10Hz ~ 100kHz continuous 0.001Hz resolution	10Hz ~ 200kHz continuous 0.001Hz resolution	10Hz ~ 300kHz continuous 0.001Hz resolution		
Measurement Range	L	0.00001µH ~ 9999,99Н				
	с	0.00001pF ~ 9999.99mF				
	R, X, Z	0.00000 ~ 99.9999ΜΩ				
	B, G	0.01nS ~ 999.999S				
	D	0.00001 ~ 9.99999				
	Q	0.00001 ~ 99999.9				
	θd	-179.999° ~ 179.999°				
	θr	-3.14159 ~ 3.14159				
	DCR	0.00001Ω ~ 99.9999ΜΩ				
Test Signal Level		0.01V ~ 2.00Vrms, 0.01V resolution				
Output Impedance		Test signal accuracy: ± (10% + 10mV) 30Ω, 50Ω and 100Ω, 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-θrad, z-θdeg, 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 CD, 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	10Hz~100kHz (continuous)	Accuracy: 0.05%	510150
GPS-3138C	Benchtop LCR Meter	10Hz~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 ≤3000m Services

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

Visit www.gpslimited.com/registerproduct

Please contact for more information

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