

## HAND HELD LCR METER



## LCR-916/915/914 (100/10/1kHz)

### FEATURES

- 20,000/2,000 Counts Dual Display
- Test Frequency : 100/120Hz/1kHz/10kHz/100kHz Depend on Model
- Auto LCR Mode for DUT Measuring
- 0.2% Basic Accuracy
- Measurement Parameters : L , C , R (AC/DC) , D , Q , ESR ,  $\theta$
- Parallel/Series Testing Mode
- Sorting Mode for Quality Control
- 2Wire or 5Wire Measurement Available
- Data Hold and Zero Mode Supported
- Max and Min (LCR-916 Only)
- Auto Range, Auto Backlit
- Low Battery Indication
- Auto Power Off
- Data Collection or DC Power Operation (Optional for LCR-915)

The LCR-916/915/914 is a smart, convenient and fully-functional dual display handheld LCR meter. The test frequency extends as high as 100 kHz/10/1kHz, providing greater flexibility to test a wider range of components. The LCR-916/915/914 uses a dual 20,000/2000 count display. The 20000 count display is used for displaying primary parameters such as capacitance, inductance, reactance and resistance and a 2000 count display is for secondary parameters such as Q, D, ESR and RP measurements. Secondary measurements can also be combined with the primary measurement while the primary measurement is still being taken.

The LCR-916/915/914 provides two measurement methods, 2 wire and 5 wire measurement, The LCR-916/915/914 also come with a host of various standard or optional accessories to assist in testing a number of different component types. The meters also include handy functions such as data hold, tolerance sorting, zero mode and Min/Max (LCR-916 only).

The meters' USB interface can be used to log data to a PC using the LCR-900 software and provide the DC 5V needed to power the meter.

With the LCR-916/915/914, you can perform quick and basic LCR measurements with precision at an affordable price.

### AUTO LCR Mode

The meter automatically identifies the specified L, C, or R parameters for both parallel and series circuits while the DUT is being measured. This AUTO LCR mode can be active for the selected function or every time the meter is turned on.



### Connectivity for Data Logging to PC

The LCR900 software is available for your handheld LCR meter. This software is to configure the measurement parameters and automate the recording of continuous readings.



### Complete Accessories

The LCR-916 is provided with a complete accessories kit including alligator clips, an SMD test probe, a USB cable, an AC adaptor and a shorting cube to increase measurement options without the extra cost.



### Flexible Operation

AA sized batteries, USB power or an AC adapter can be used to power the meters, giving you a number of options for portability.



### APPLICATIONS

- Field Services
- Passive Component Trouble Shooting
- Electronic Assembly
- Incoming Inspection(Component Sorting)

LCR-916/915/914

**GW INSTEK**  
Simply Reliable

## SPECIFICATIONS

|                        |  | LCR-916  | LCR-915                              | LCR-914                        |
|------------------------|--|--|--------------------------------------|--------------------------------|
| TEST FREQUENCY         |  | 100Hz/120Hz/1kHz/10kHz/<br>100kHz Selectable   | 100Hz/120Hz/1kHz/10kHz<br>Selectable | 100Hz/120Hz/1kHz<br>Selectable |
| FULL SCALE             |  | Main Display: 20,000/2,000 count Selectable<br>Sub Display : 2,000 count   |                                      |                                |
| INDUCTANCE             | Range<br>Best Accuracy<br>Resolution   | 20uH ~ 20kH range depends on the selected test frequency<br>± (0.2% rdg + 2 digits)<br>0.001uH ~ 0.001kH depends on the selected range |                                      |                                |
| CAPACITANCE            | Range<br>Best Accuracy<br>Resolution   | 20pF ~ 20mF range depends on the selected test frequency<br>± (0.2% rdg + 2 digits)<br>0.001pF ~ 0.001mF depends on the selected range |                                      |                                |
| RESISTANCE             | Range<br>Best Accuracy<br>Resolution   | 20Ω ~ 200MΩ range depends on the selected test frequency<br>± (0.2% rdg + 2 digits)<br>0.001Ω ~ 0.01MΩ depends on the selected range   |                                      |                                |
| DC RESISTANCE          | Range<br>Best Accuracy<br>Resolution   | 200Ω ~ 200MΩ in 7 ranges<br>± (0.2% rdg + 2 digits)<br>0.01Ω ~ 0.01MΩ depends on the selected range                                    |                                      |                                |
| QUALITY FACTOR (Q)     | Range<br>Accuracy<br>Best Resolution   | 0.000 ~ 999<br>2 x (main parameter accuracy)<br>0.001  |                                      |                                |
| DISSIPATION FACTOR (D) | Range<br>Accuracy<br>Best Resolution   | 0.000 ~ 999<br>2 x (main parameter accuracy)<br>0.001  |                                      |                                |
| PHASE ANGLE (θ)        | Range<br>Accuracy<br>Resolution  | -90.0° ~ 90.0°<br>± (0.2% rdg + 5 digits)<br>0.1°  |                                      |                                |
| MEASUREMENT CIRCUIT    | Parallel or Series Selectable  |  |                                      |                                |
| AUTO LCR MODE          | Automatically identifies and measures the DUT when the meter is switched on                      |  |                                      |                                |
| SORTING MODE           | ±0.1%, ±0.2%, ±0.25%, ±0.5%, ±1.0%, ±2.0%, ±5.0%, ±10.0%, ±20.0% and +80%/-20% Selectable        |  |                                      |                                |
| OTHER FUNCTIONS        | Auto range, Auto back-light, Max, Min, Data Hold, Zero, 46 segments Analogue bar, Auto power off |  |                                      |                                |
| DISPLAY                | LCD mono display   |  |                                      |                                |
| INTERFACE              | USB  |  |                                      |                                |
| POWER SOURCE           | AA Battery 1.5V x 4, DC 5V (through AC adapter or USB cable - optional for LCR-915)              |  |                                      |                                |
| DIMENSIONS & WEIGHT    | 95(W) x 207(H) x 52(D) mm, Approx. 630 g   |  |                                      |                                |

Note : Specifications are performed by test cable length = 0m

Specifications subject to change without notice. CR-900SGD1D1H

### ORDERING INFORMATION

**LCR-916** 100kHz Hand-held LCR Meter  
**LCR-915** 10kHz Hand-held LCR Meter  
**LCR-914** 1kHz Hand-held LCR Meter

### ACCESSORIES

User manual x 1, Battery

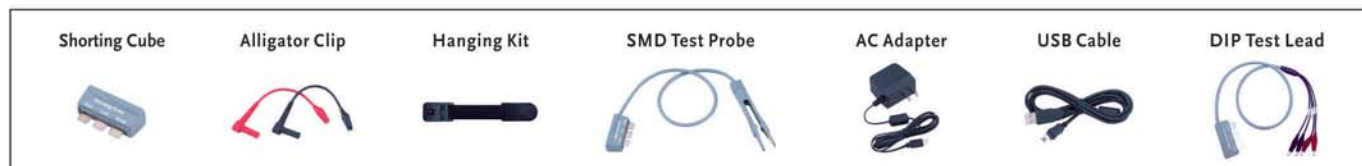
### OPTIONAL ASSESSORIES

**Opt.01** 4Wire DIP test lead  
**Opt.02** Accessory Pack for LCR-915  
**Opt.03** Accessory Pack for LCR-914  
**Opt.04** Magnetic Hang kit for LCR-914

Note : 1. One year warranty, excluding accessories  
 2. The accessory pack for LCR-915 includes SMD test probe, AC adapter, USB cable and CD.

### ACCESSORIES GUIDE

| MODEL             | LCR-916  | LCR-915  | LCR-914  |
|-------------------|----------|----------|----------|
| Shorting Cube     | Standard | Standard | Standard |
| Alligator Clip    | Standard | Standard | Standard |
| Magnetic Hang Kit | Standard | Standard | Opt. 04  |
| 4 Wire SMD Probe  | Standard | Opt. 02  | Opt. 03  |
| AC Power Adapter  | Standard | Opt. 02  | Opt. 03  |
| USB Cable         | Standard | Opt. 02  | Opt. 03  |
| PC Software (CD)  | Standard | Opt. 02  | N/A      |
| 4 Wire DIP Clip   | Opt. 01  | Opt. 01  | Opt. 01  |



Global Headquarters  
**GOOD WILL INSTRUMENT CO., LTD.**  
 No.7-1, Jhongsing Road, Tucheng Dist., New Taipei City 236, Taiwan  
 T +886-2-2268-0389 F +886-2-2268-0639  
 E-mail: marketing@goodwill.com.tw

China Subsidiary  
**GOOD WILL INSTRUMENT (SUZHOU) CO., LTD.**  
 No. 521, Zhujiang Road, Snd, Suzhou Jiangsu 215011 China  
 T +86-512-6661-7177 F +86-512-6661-7277  
 E-mail: marketing@instek.com.cn

Malaysia Subsidiary  
**GOOD WILL INSTRUMENT (M) SDN. BHD.**  
 27, Persiaran Mahsuri 1/1, Sunway Tunas,  
 11900 Bayan Lepas, Penang, Malaysia  
 T +604-6309988 F +604-6309989  
 E-mail: sales@goodwill.com.my

Europe Subsidiary  
**GOOD WILL INSTRUMENT EURO B.V.**  
 De Run 5427A, 5504DG Veldhoven, THE NETHERLANDS  
 T +31(0)40-2557790 F +31(0)40-2541194

U.S.A. Subsidiary  
**INSTEK AMERICA CORP.**  
 5198 Brooks Street Montclair, CA 91763, U.S.A.  
 T +1-909-399-3535 F +1-909-399-0819  
 E-mail: sales@instekamerica.com

Japan Subsidiary  
**TEXIO TECHNOLOGY CORPORATION.**  
 7F Towa Fudosan Shin Yokohama Bldg., 2-18-13 Shin  
 Yokohama, Kohoku-ku, Yokohama, Kanagawa,  
 222-0033 Japan  
 T +81-45-620-2305 F +81-45-534-7181  
 E-mail: info@texio.co.jp

Korea Subsidiary  
**GOOD WILL INSTRUMENT KOREA CO., LTD.**  
 #1406, Ace Hightech-City B/D 1Dong,  
 Mullaee-Dong 3Ga 55-20, Yeongduengpo-Gu, Seoul, Korea  
 T +82-2-3439-2205 F +82-2-3439-2207  
 E-mail: gwinstek@gwinstek.co.kr

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