

# Agilent U1700 Series Handheld Capacitance/LCR Meters

From the leader in LCR meters:  
LCR testing without the wait

Sharing a bench LCR meter is practical, but isn't always convenient. With Agilent's new line of handheld capacitance and LCR meters, you can perform quick, basic LCR measurements at your convenience. Better yet, our handheld models extend the tradition of our industry-leading benchtop units to a lower price point. Now, everyone on your team can be equipped for passive-component testing — on the bench or on the go — without the wait.

Agilent now offers its latest capacitance and LCR meters - in all-new orange!



### Agilent's range of handheld capacitance and LCR meters offer you:

- Assurance of quality and reliability from the world's No.1 LCR meter manufacturer
- Affordable tools for quick, indicative LCR tests
- Convenient on-the-go LCR testing in small form factor



PC data logging with optional IR-to-USB cable



1. Max, Min and Avg values recording
2. Visible and audible tolerance mode for component sorting
3. U1700 series LCR meters : Auto-calculation of Phase Angle (U1732A /U1732B only), Dissipation Factor and Quality Factor
4. One-touch access to capacitance, inductance (U1700 series LCR meters) and resistance (U1700 series LCR meters) measurements
5. Guard terminal for better noise immunity (to be used with SMD tweezer)
6. Dual display with backlight (U1701A/U1701B/ U1732A/U1732B)
7. U1701A /U1701B : 11,000 counts resolution  
U1700 series LCR meters : 20,000 counts resolution
8. Data Hold function to freeze readings
9. U1700 series LCR meters : 2 to 4 selectable test frequencies
10. Relative mode

## Quick Fact Sheet

### Key specifications

	U1701A /U1701B	U1731A /U1731B	U1732A /U1732B
<b>Display</b>			
Type	Segmented, transfective dual-display LCD	Segmented, transfective dual-display LCD	Segmented, transfective dual-display LCD
Resolution	11,000 counts	20,000 counts	20,000 counts
Backlit	Yes	No	Yes
<b>Resistance</b>			
Range	N/A	0.001 $\Omega$ to 9.999 M $\Omega$	0.001 $\Omega$ to 9.999 M $\Omega$
Accuracy	N/A	Up to 0.5 % + 3 lsd	Up to 0.5 % + 3 lsd
<b>Capacitance</b>			
Range	0.1 pF to 199.99 mF	0.1 pF to 19.99 mF	0.01 pF to 19.99 mF
Accuracy	Up to 0.5 % + 3 lsd	Up to 0.7 % + 3 lsd	Up to 0.7 % + 3 lsd
<b>Inductance</b>			
Range	N/A	0.1 $\mu$ H to 999.9 H	0.1 $\mu$ H to 999.9 H
Accuracy	N/A	Up to 0.7 % + 5 lsd	Up to 0.7 % + 5 lsd
<b>Others</b>			
Dissipation factor	N/A	Yes	Yes
Quality factor	N/A	Yes	Yes
$\theta$ measurement	N/A	No	Yes
Tolerance	1 %, 5 %, 10 %, 20 %	1 %, 5 %, 10 %	1 %, 5 %, 10 %, 20 %
Compare	25 sets of non-volatile High/Low limit settings	No	No
Test method/frequency	DC charge/discharge	Selectable 120 Hz/1 kHz	Selectable 100 Hz/120 Hz/1 kHz/10 kHz
Data logging to PC	Optional via IR-to-USB cable	Optional via IR-to-USB cable	Optional via IR-to-USB cable
External power	Optional via external power adapter	Optional via external power adapter	Optional via external power adapter
<b>MSRP</b>	<b>\$150</b>	<b>\$276</b>	<b>\$331</b>

### Optional accessories:

U1174A Soft carrying case



U1782A SMD tweezer



U5481A IR-to-USB cable



U1780A Power adapter  
(Power cord included based on country)



### Ordering information:

Each unit is shipped with:

- Quick Start Guide
- Alligator clip leads
- 9 V Alkaline battery
- Certification of Calibration (CoC)



U1701A



U1701B



U1731A



U1731B



U1732A



U1732B

### Recommended service options

Additional two years of Return-to-Agilent warranty  
Additional two years of Return-to-Agilent calibrations  
For more information go to  
[www.agilent.com/find/removealldoubt](http://www.agilent.com/find/removealldoubt)

Product specifications and descriptions in this document subject to change without notice.

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5990-3602END1