

## Quick Fact Sheet

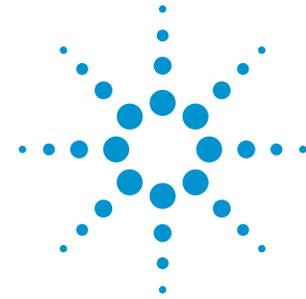
# Agilent U1700 Series Handheld Capacitance/LCR Meters

From the leader in LCR meters:

Take your expectations higher- with the new U1730C Series LCR meters

The U1730C Series handheld LCR meters now extends the measurement frequencies up to 100 kHz- a capability which is typically found only in benchtop meters. The meters offer auto identification, *Ai* capability which conveniently displays component type. You can also get measurements done faster and more efficiently with more detailed component analysis functions such as Z, ESR and DCR.

Together with the U1701B capacitance meter, you are now equipped for passive component testing - on the bench or on the go.

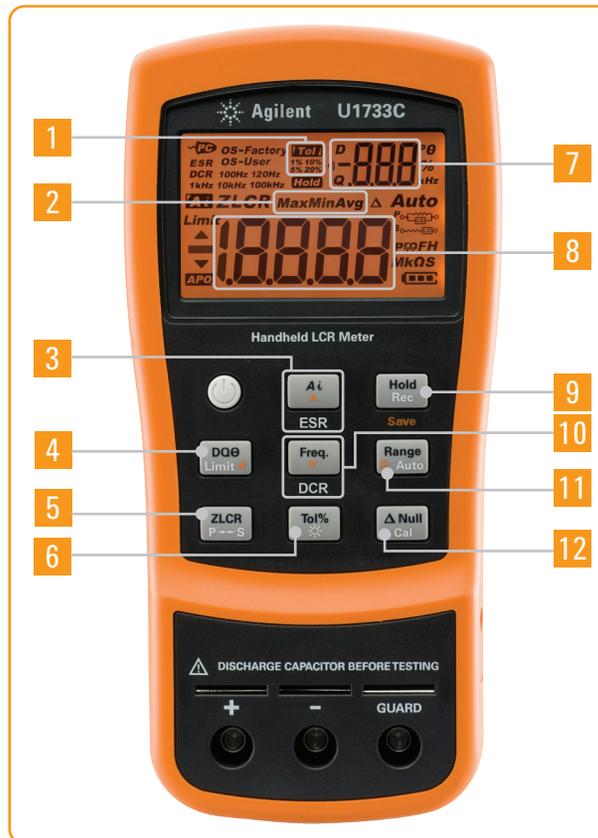


Agilent's range of handheld capacitance and LCR meters offer you:

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



PC data logging with optional IR-to-USB cable.



1. Visible and audible tolerance mode for component sorting
2. Maximum, Minimum and Average values recording
3. *Ai* helps identify L, C and R components automatically according to level of impedance  
ESR function for capacitance series resistance analysis
4. Auto-calculation of Phase Angle, Dissipation Factor and Quality Factor
5. To select desired Z, L, C or R function
6. To enter tolerance range of 1%, 5%, 10% and 20%  
Backlight function to ease viewing in subdued lighting (only in U1732C/U1733C)
7. Secondary display
8. 20,000 counts resolution
9. Data Hold function to freeze and save measured values
10. To select desired test frequency:
  - U1731C: Up to 1 kHz
  - U1732C: Up to 10 kHz
  - U1733C: Up to 100 kHzTo enable DCR measurement (only in U1733C)
11. Allows manual or auto ranging to be used interchangeably
12. To enter relative mode and stores display reading as a reference value



**Agilent Technologies**

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## Key specifications

	U1701B	U1731C	U1732C	U1733C
Display				
Type	Segmented, transfective dual display LCD			
Resolution	11,000 counts	20,000 counts	20,000 counts	20,000 counts
Backlight	Yes	No	Yes	Yes
Resistance				
Range	N/A	2 $\Omega$ to 200 M $\Omega$	2 $\Omega$ to 200 M $\Omega$	2 $\Omega$ to 200 M $\Omega$
Accuracy	N/A	0.2% + 3 counts	0.2% + 3 counts	0.2% + 3 counts
Capacitance				
Range	1000 pF to 199.99 mF	20 pF to 20 mF	20 pF to 20 mF	20 pF to 20 mF
Accuracy	Up to 0.5% + 3 counts	0.2% + 3 counts	0.2% + 3 counts	0.2% + 3 counts
Inductance				
Range	N/A	20 $\mu$ H to 2000 H	20 $\mu$ H to 2000 H	20 $\mu$ H to 2000 H
Accuracy	N/A	0.2% + 3 counts	0.2% + 3 counts	0.2% + 3 counts
Others				
Ai	N/A	Yes	Yes	Yes
ESR	N/A	Yes	Yes	Yes
DCR	N/A	No	No	Yes
D/Q/ $\theta$	N/A	Yes	Yes	Yes
Tolerance	1%, 5%, 10%, 20%	1%, 5%, 10%, 20%	1%, 5%, 10%, 20%	1%, 5%, 10%, 20%
Compare	25 sets of predefined High/Low limit	N/A	N/A	N/A
Test method/frequency	DC charge/discharge	100 Hz, 120 Hz, 1 kHz	100 Hz, 120 Hz, 1 kHz, 10 kHz	100 Hz, 120 Hz, 1 kHz, 10 kHz, 100 kHz
Data logging to PC	Optional via IR-USB cable			
External power	Optional via external power adapter			

### 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)

## Ordering information

Each unit is shipped with:

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



## Optional accessories

U1174A Soft carrying case



U1782A SMD tweezer



U5481A IR-to-USB cable



U1780A Power adapter (Power cord included based on country)

