Quick Fact Sheet

Agilent U1700 Series Handheld Capacitance/LCR Meters

With the U1730C Series that is built for your convenience, we hope you'll start to feel like we do: It's time to retool your expectations in handheld LCR meters.

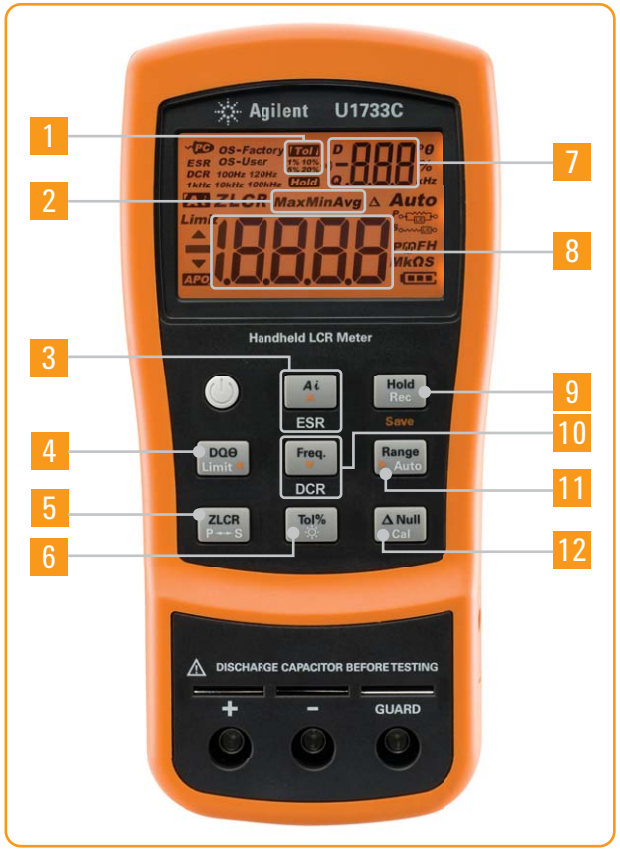
The U1730C Series handheld LCR meters now extend the measurement frequencies up to 100 kHz- a capability which is typically found only in benchtop meters. The meters offer auto identification, *Ai* capability which conveniently displays component type. You can also get measurements done faster and more 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 kHz

    To 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

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Key specifications

	U1701B	U1731C	U1732C	U1733C
		Display		
Type	Segmented, transflective dual display LCD	Segmented, transflective dual display LCD	Segmented, transflective dual display LCD	Segmented, transflective 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 Ω to 200 MΩ	2 Ω to 200 MΩ	2 Ω to 200 MΩ
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 µH to 2000 H	20 µH to 2000 H	20 µH 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/θ	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	Optional via IR-USB cable	Optional via IR-USB cable	Optional via IR-USB cable
External power	Optional via external power adapter	Optional via external power adapter	Optional via external power adapter	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**

Ordering information

Each unit is shipped with:

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

U1701B U1731C U1732C U1733C

Optional accessories

U1174A Soft carying case

U5481A IR-to-USB cable

U1782A SMD tweezer

U1780A Power adapter (Power cord included based on country)

Technical data, availability and pricing subject to change without notice.

5990-7693EN

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