

Keysight 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.



The Keysight Technologies, Inc. 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
4. ESR function for capacitance series resistance analysis
5. Auto-calculation of Phase Angle, Dissipation Factor and Quality Factor
6. To select desired Z, L, C or R function
7. To enter tolerance range of 1%, 5%, 10% and 20%
8. Backlight function to ease viewing in subdued lighting (only in U1732C/U1733C)
9. Secondary display
10. 20,000 counts resolution
11. Data Hold function to freeze and save measured values
12. 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

Key specifications

	U1701B	U1731C	U1732C	U1733C
Display				
Type	Segmented, transfective dual display LCD	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	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

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Keysight Services helps you improve productivity and product quality with our comprehensive service offerings of one-stop calibration, repair, asset management, technology refresh, consulting, training, and more.

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



U5481A IR-to-USB cable



U1782A SMD tweezer



U1780A Power adapter (Power cord included based on country)