



# UNI-T Meters UT151 Series Modern Digital Multimeters User Guide

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**UNI-T Meters UT151 Series Modern Digital Multimeters**



## Product Information

- Product Name: UT151 Series
- Model Numbers: UT151A, UT151C, UT151F
- Measurement Functions: DC/AC Voltage, DC/AC Current, Resistance, Capacitance, Diode, Temperature (UT151F), Battery (UT151A), Continuity
- Display Count: 2000
- Maximum Voltage Range: Up to 600V (DC/AC)
- Maximum Current Range: Up to 10A (DC/AC)
- Features: Stable and reliable operations, Large-scale integrated circuits, Dual integral A/D converter, Overload protection for all ranges
- Manufacturer Website: [www.uni-trend.com](http://www.uni-trend.com)

## Product Usage Instructions

1. To measure DC voltage, select the appropriate range (200mV/2V/20V/200V/600V) and connect the multimeter's probes to the circuit.
2. To measure AC voltage, select the appropriate range (2V/20V/200V/600V) and connect the multimeter's probes to the circuit.
3. To measure DC current, select the appropriate range (200uA/2mA/20mA/200mA/10A) and connect the

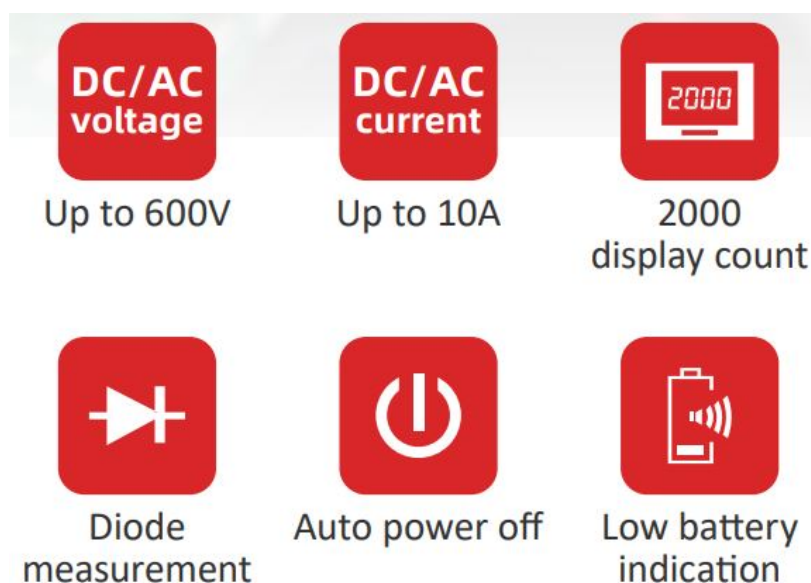
multimeter's probes in series with the circuit.

4. To measure AC current, select the appropriate range (2mA/20mA/200mA/10A) and connect the multimeter's probes in series with the circuit.
5. To measure resistance, select the appropriate range (200/2K/20K/200K/2M/20M/200M) and connect the multimeter's probes to the resistor.
6. To measure capacitance, select the appropriate range (2nF/20nF/200nF/2F/100F) and connect the multimeter's probes to the capacitor.
7. To measure diode, select the diode measurement function and connect the multimeter's probes to the diode.
8. To measure temperature (UT151F), select the temperature measurement function and connect the temperature sensor to the multimeter.
9. To measure battery voltage (UT151A), select the battery measurement function and connect the multimeter's probes to the battery terminals.
10. To check continuity, select the continuity measurement function and connect the multimeter's probes to the circuit.
11. Ensure that the multimeter's auto power off feature is enabled to conserve battery life.
12. Replace the battery when the low battery indicator is displayed.

UT151 Series are 2000-count handheld digital multimeters featuring remarkably stable and reliable operations. They are designed with large-scale integrated circuits and dual integral A/D converter and also offer overload protection for all ranges. The series can measure DC/AC voltage, DC/AC current, resistance, capacitance, diode, temperature, frequency (UT151F), battery (UT151A) and continuity, which make it a perfect solution for your work.

## **Specification**


| Specifications              | Range  | UT151A           | UT151C         | UT151F          |
|-----------------------------|--|------------------|----------------|-----------------|
| DC voltage (V)              | 200mV/2V/20V/200V/600V   | $\pm(0.5\%+1)$   | $\pm(0.5\%+1)$ | $\pm(0.05\%+3)$ |
| AC voltage (V)              | 2V/20V/200V/600V   | $\pm(0.8\%+3)$   | $\pm(0.8\%+3)$ |                 |
|                             | 200mV/2V/20V/200V/600V   |                  |                | $\pm(0.5\%+10)$ |
| DC current (A)              | 200uA/2mA/20mA/200mA/10A   | $\pm(0.8\%+1)$   |                |                 |
|                             | 2mA/20mA/200mA/10A   |                  | $\pm(0.8\%+1)$ | $\pm(0.5\%+5)$  |
|                             | 200uA/2mA/200mA/10A  | $\pm(1\%+3)$     |                |                 |
| AC current (A)              | 20mA/200mA/10A   |                  | $\pm(1\%+3)$   |                 |
|                             | 2mA/20mA/200mA/10A   |                  |                | $\pm(0.8\%+10)$ |
| Resistance ( $\Omega$ )     | 200 $\Omega$ /2K $\Omega$ /20K $\Omega$ /200K $\Omega$ / 2M $\Omega$ /20M $\Omega$ | $\pm(1\%+2)$     |                |                 |
|                             |  |                  |                |                 |
|                             | 200 $\Omega$ /2K $\Omega$ /20K $\Omega$ /200K $\Omega$ / 2M $\Omega$ /20M $\Omega$ |                  | $\pm(1\%+2)$   | $\pm(0.3\%+1)$  |
|                             | 2nF/20nF/200nF/2 $\mu$ F/100 $\mu$ F   |                  | $\pm(4\%+3)$   |                 |
| Capacitance (F)             | 2 $\mu$ F/200 $\mu$ F  | $\pm(4\%+3)$     |                |                 |
|                             |  | >50uF for refer. |                |                 |
|                             | 20nF/200nF/2 $\mu$ F/20 $\mu$ F  |                  |                | $\pm(4\%+20)$   |
| Frequency (Hz)              | 20KHz  |                  |                | $\pm(1.5\%+5)$  |
| Temperature ( $^{\circ}$ C) | -40 $^{\circ}$ C~1000 $^{\circ}$ C   |                  | $\pm(1\%+5)$   |                 |
| Temperature ( $^{\circ}$ F) | -40 $^{\circ}$ F~1832 $^{\circ}$ F   |                  | $\pm(1\%+8)$   |                 |



## Feature

|                          |             |           |      |      |
|--------------------------|-------------|-----------|------|------|
| Display count            |             | 2000      | 2000 | 2000 |
| Manual range             |             | √         | √    | √    |
| Battery test             | 12V/9V/1.5V | ±(2.5%+2) |      |      |
| Diode                    |             | √         | √    | √    |
| Auto power off           |             | √         | √    | √    |
| Continuity buzzer        |             | √         | √    | √    |
| Low battery indication   |             | √         | √    | √    |
| Data hold                |             | √         | √    | √    |
| Input impedance for DC V | ≥10MΩ       | √         | √    | √    |

## Documents / Resources

|   |  |
|---|--|
|  | <a href="#">UNI-T Meters UT151 Series Modern Digital Multimeters</a> [pdf] User Guide<br>UT151A, UT151C, UT151F, UT151 Series, Modern Digital Multimeters, UT151 Series Modern Digital Multimeters, Digital Multimeters, Multimeters |
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## References

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