

Code: UT-139C

## UNIVERSAL METER **UT-139C** UNI-T

The UT-139C is a universal digital meter used to measure: voltage, current, resistance, capacity, frequency, temperature and checking the correct operation of diodes. EF function - enables non-contact voltage detection eg in wires, in the range of 50V ... 400V.

The kit includes a thermocouple of type "K" (chromel/alumel).



DC voltage measurement:	40 mV $\pm$ (0.5% + 2) @ 10 $\mu$ V , 400 mV $\pm$ (0.5% + 2) @ 0.1 mV , 4 V $\pm$ (0.7% + 3) @ 1 mV , 40 V $\pm$ (0.7% + 3) @ 10 mV , 400 V $\pm$ (0.7% + 3) @ 0.1 V , 600 V $\pm$ (0.7% + 3) @ 1 V
AC voltage measurement:	<ul style="list-style-type: none"> <li>• V.F.C. OFF (45 Hz ... 1000 Hz) :</li> <li>40 mV <math>\pm</math> (1.0% + 3) @ 10 <math>\mu</math>V ,</li> <li>400 mV <math>\pm</math> (1.0% + 3) @ 0.1 mV ,</li> <li>4 V <math>\pm</math> (0.8% + 3) @ 1 mV ,</li> <li>40 V <math>\pm</math> (0.8% + 3) @ 10 mV ,</li> <li>400 V <math>\pm</math> (0.8% + 3) @ 0.1 V ,</li> <li>600 V <math>\pm</math> (1.0% + 3) @ 1 V ,</li> <li>• V.F.C. ON (45 Hz ... 400 Hz) :</li> <li>200 V ... 600 V <math>\pm</math> (4.0% + 3) @ 0.1 V / 1 V</li> </ul>

DC current measurement:	<p>400 <math>\mu\text{A} \pm (0.7\% + 2)</math> @ 0.1 <math>\mu\text{A}</math> ,            4000 <math>\mu\text{A} \pm (0.7\% + 2)</math> @ 1 <math>\mu\text{A}</math> ,            40 mA <math>\pm (0.7\% + 2)</math> @ 10 <math>\mu\text{A}</math> ,            400 mA <math>\pm (0.7\% + 2)</math> @ 0.1 mA ,            4 A <math>\pm (1.0\% + 3)</math> @ 1 mA ,            10 A <math>\pm (1.0\% + 3)</math> @ 10 mA ,</p> <p>Current clamp measurement (not included) :            60 A  <math>\pm (1.0\% + 3)</math>            @ 0.01 A</p>
AC current measurement:	<p>400 <math>\mu\text{A} \pm (1.0\% + 3)</math> @ 0.1 <math>\mu\text{A}</math> ,            4000 <math>\mu\text{A} \pm (1.0\% + 3)</math> @ 1 <math>\mu\text{A}</math> ,            40 mA <math>\pm (1.0\% + 3)</math> @ 10 <math>\mu\text{A}</math> ,            400 mA <math>\pm (1.0\% + 3)</math> @ 0.1 mA ,            4 A <math>\pm (1.2\% + 3)</math> @ 1 mA ,            10 A <math>\pm (1.2\% + 3)</math> @ 10 mA ,</p> <p>Current clamp measurement (not included) :            60 A  <math>\pm (1.2\% + 3)</math>            @ 0.01 A</p>
Resistance measurement:	<p>400 <math>\Omega \pm (1.0\% + 2)</math> @ 0.1 <math>\Omega</math> ,            4 k<math>\Omega \pm (1.0\% + 2)</math> @ 1 <math>\Omega</math> ,            40 k<math>\Omega \pm (1.0\% + 2)</math> @ 10 <math>\Omega</math> ,            400 k<math>\Omega \pm (1.0\% + 2)</math> @ 100 <math>\Omega</math> ,            4 M<math>\Omega \pm (1.0\% + 2)</math> @ 1 k<math>\Omega</math> ,            40 M<math>\Omega \pm (1.2\% + 3)</math> @ 10 k<math>\Omega</math></p>
Capacitance measurement:	<p>9.999 nF <math>\pm (4.0\% + 10)</math> @ 1 pF ,            99.99 nF ... 999.9 <math>\mu\text{F} \pm (4.0\% + 5)</math> @ 10 pF / 0.1 <math>\mu\text{F}</math> ,            9.999 mF ... 99.99 mF <math>\pm 10.0\%</math> (<math>\leq 2</math> mF) @ 1 <math>\mu\text{F}</math> / 10 <math>\mu\text{F}</math></p>
Inductance measurement:	—
Frequency measurement:	9.999 Hz ... 9.999 MHz $\pm (0.15 + 4)$ @ 0.001 Hz ... 0.001 MHz
Square-wave signal duty ratio measurement:	1 % ... 99.9 % @ 0.1 %
Temperature measurement:	<p>• °C :</p> <p>-40 ... 0 °C <math>\pm 3</math> @ 1 °C ,            0 ... 100 °C <math>\pm (1.0\% + 3)</math> @ 1 °C ,            100 ... 1000 °C <math>\pm (2.0\% + 3)</math> @ 1 °C ,</p> <p>• °F :</p> <p>-40 ... 32 °F <math>\pm 5</math> @ 1 °F ,            32 ... 212 °F <math>\pm (1.5\% + 5)</math> @ 1 °F ,            212 ... 1832 °F <math>\pm (2.5\% + 5)</math> @ 1 °F</p>
hFE:	—
Diode test:	✓
Sound signal of the continuity test:	✓
Checking TTL logic states:	—
RS-232:	—





# DATA SHEET

Main features:	<ul style="list-style-type: none"><li>• Large, readable LCD display with backlight</li><li>• EF function - enables non-contact voltage detection eg in wires, in the range of 50V ... 400V</li><li>• Hold - stopping the meter reading</li><li>• REL - relative measurement mode</li><li>• V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz</li><li>• Aesthetic and solid construction</li></ul>
Power supply:	2 x 1.5V, type AA/LR6/FR6 battery - included
Dimensions:	176 x 81 x 48 mm
Manufacturer / Brand:	UNI-T
Guarantee:	2 years