

Code: UT-139S

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

The UT-139S is a universal digital meter used to measure: voltage, current, resistance, capacity, frequency, temperature and checking the correct operation of diodes. In addition, the meter has an electric field detection function (NCV).

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



|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC voltage measurement: | 60 mV $\pm$ (0.7% + 3) @ 0.01 mV ,<br>600 mV $\pm$ (0.5% + 2) @ 0.1 mV ,<br>6 V $\pm$ (0.7% + 3) @ 0.001 V ,<br>60 V $\pm$ (0.7% + 3) @ 0.01 V ,<br>600 V $\pm$ (0.7% + 3) @ 0.1 V                                                                                                                                                                                                                                                                                                                |
| AC voltage measurement: | <ul style="list-style-type: none"> <li>• V.F.C. OFF :</li> </ul> 60 mV $\pm$ (1.0% + 3) @ 0.01 mV ,<br>600 mV $\pm$ (1.0% + 3) @ 0.1 mV ,<br>6 V $\pm$ (0.8% + 3) @ 0.001 V ,<br>60 V $\pm$ (0.8% + 3) @ 0.01 V ,<br>600 V $\pm$ (0.8% + 3) @ 0.1 V ,<br>600 V $\pm$ (1.0% + 3) @ 1 V ,<br><ul style="list-style-type: none"> <li>• V.F.C. ON :</li> </ul> 600 V $\pm$ (4.0% + 3) @ 0.1 V / 1 V<br><ul style="list-style-type: none"> <li>• LoZ mode :</li> </ul> 600 V $\pm$ (2.0% + 10) @ 0.1 V |

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC current measurement:                    | 600 $\mu$ A $\pm$ (0.7% + 2) @ 0.1 $\mu$ A ,<br>6000 $\mu$ A $\pm$ (0.7% + 2) @ 1 $\mu$ A ,<br>60 mA $\pm$ (0.7% + 2) @ 0.01 mA ,<br>600 mA $\pm$ (0.7% + 2) @ 0.1 mA ,<br>6 A $\pm$ (1.0% + 3) @ 0.001 A ,<br>10 A $\pm$ (1.0% + 3) @ 0.01 A                                                                                                                                                                     |
| AC current measurement:                    | 600 $\mu$ A $\pm$ (1.0% + 3) @ 0.1 $\mu$ A ,<br>6000 $\mu$ A $\pm$ (1.0% + 3) @ 1 $\mu$ A ,<br>60 mA $\pm$ (1.0% + 3) @ 0.01 mA ,<br>600 mA $\pm$ (1.0% + 3) @ 0.1 mA ,<br>6 A $\pm$ (1.2% + 3) @ 0.001 A ,<br>10 A $\pm$ (1.2% + 3) @ 0.01 A                                                                                                                                                                     |
| Resistance measurement:                    | 600 $\Omega$ $\pm$ (1.0% + 2) @ 0.1 $\Omega$ ,<br>6 k $\Omega$ $\pm$ (0.8% + 2) @ 0.001 k $\Omega$ ,<br>60 k $\Omega$ $\pm$ (0.8% + 2) @ 0.01 k $\Omega$ ,<br>600 k $\Omega$ $\pm$ (0.8% + 2) @ 0.1 k $\Omega$ ,<br>6 M $\Omega$ $\pm$ (1.2% + 3) @ 0.001 M $\Omega$ ,<br>60 M $\Omega$ $\pm$ (1.5% + 5) @ 0.01 M $\Omega$                                                                                        |
| Capacitance measurement:                   | 9.999 nF $\pm$ (4.0% + 10) @ 0.001 nF ,<br>99.99 nF ... 999.9 $\mu$ F $\pm$ (4.0% + 5) @ 0.01 nF ... 0.1 $\mu$ F ,<br>9.999 mF ... 99.99 mF $\pm$ 10.0% @ 0.001 mF ... 0.01 mF                                                                                                                                                                                                                                    |
| Inductance measurement:                    | —                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Frequency measurement:                     | 9.999 Hz ... 9.999 MHz $\pm$ (0.1% + 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 ... 40 °C <math>\pm</math> 4 @ 1 °C ,<br/>&gt; 40 ... 500 °C <math>\pm</math> (1.0% + 4) @ 1 °C ,<br/>&gt; 500 ... 1000 °C <math>\pm</math> (2.0% + 4) @ 1 °C ,</p> <p>• °F :</p> <p>-40 ... 104 °F <math>\pm</math> 5 @ 1 °F ,<br/>&gt; 104 ... 932 °F <math>\pm</math> (1.5% + 5) @ 1 °F ,<br/>&gt; 932 ... 1832 °F <math>\pm</math> (2.5% + 5) @ 1 °F</p>                                 |
| hFE:                                       | —                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Diode test:                                | ✓                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Sound signal of the continuity test:       | ✓                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Checking TTL logic states:                 | —                                                                                                                                                                                                                                                                                                                                                                                                                 |
| RS-232:                                    | —                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Main features:                             | <ul style="list-style-type: none"> <li>• Large, readable LCD display with backlight</li> <li>• NCV - electric field detection function</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                                                                                                                                                                                                                                                                                                                                                                                                             |



# DATA SHEET

Guarantee:

2 years