

## DATA SHEET

Code: UT-139B

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



The UT-139B is a universal digital meter used to measure: voltage, current, resistance, capacitance, frequency, and checking the correctness of diodes operation. The meter has the function of automatic change of measuring ranges, as well as the relative measurement mode.

For AC measurements, the device has a built-in filter that eliminates high-frequency disturbances that may affect the measurement accuracy (VFC). Additionally, the UT-139B has an electric field detection (NCV) function.

DC voltage measurement:	$\begin{array}{l} 40 \text{ mV} \pm (0.7\% + 2) \ @ \ 10 \ \mu\text{V} , \\ 400 \text{ mV} \pm (0.5\% + 2) \ @ \ 0.1 \text{ mV} , \\ 4 \text{ V} \pm (0.7\% + 3) \ @ \ 1 \text{ mV} , \\ 40 \text{ V} \pm (0.7\% + 3) \ @ \ 10 \text{ mV} , \\ 400 \text{ V} \pm (0.7\% + 3) \ @ \ 0.1 \text{ V} , \\ 600 \text{ V} \pm (0.7\% + 3) \ @ \ 1 \text{ V} \end{array}$
AC voltage measurement:	• V.F.C. OFF (45 Hz 400 Hz) : $ 40 \text{ mV} \pm (1\% + 3) \ @ \ 10 \ \mu\text{V} , \\ 400 \ \text{mV} \pm (1\% + 3) \ @ \ 0.1 \ \text{mV} , \\ 4 \ V \pm (0.8\% + 3) \ @ \ 1 \ \text{mV} , \\ 40 \ V \pm (0.8\% + 3) \ @ \ 10 \ \text{mV} , \\ 400 \ V \pm (0.8\% + 3) \ @ \ 10 \ \text{mV} , \\ 400 \ V \pm (0.8\% + 3) \ @ \ 10 \ \text{mV} , \\ 600 \ V \pm (1\% + 3) \ @ \ 1 \ V, \\ \bullet \ V.F.C. \ ON \ (45 \ \text{Hz} \ \ 400 \ \text{Hz}) : \\ 200 \ V \ \ 600 \ V \pm (4\% + 3) \ @ \ 0.1 \ \text{V} / 1 \ \text{V} $
DC current measurement:	$400 \ \mu A \pm (0.7\% + 2) \ @ \ 0.1 \ \mu A \ ,$ $4000 \ \mu A \pm (0.7\% + 2) \ @ \ 1 \ \mu A \ ,$ $40 \ m A \pm (0.7\% + 2) \ @ \ 10 \ \mu A \ ,$ $400 \ m A \pm (0.7\% + 2) \ @ \ 0.1 \ m A \ ,$ $400 \ m A \pm (1.\% + 3) \ @ \ 1 \ m A \ ,$ $10 \ A \pm (1\% + 3) \ @ \ 10 \ m A$



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Capacitance measurement:       9.999 nF ± (4% + 10) · in relative measurement mode @ 1 pF , 99.99 nF 91 pF 91 nF , 99.99 nF 99.99 nF 91 pF 10 μF         Inductance measurement:       —         Frequency measurement:       9.999 nF 99.99 MHz ± (0.1% + 4) @ 0.001 Hz 0.001 MHz , 1 % 99.9 % @ 0.1 %         Square-wave signal duty ratio measurement:       —         Automatic change of measuring ranges:       ✓         hFE:       —         Diode test:       ✓         Sound signal of the continuity test:       ✓         Checking TTL logic states:       —         RS-232:       —         NCV - electric field detection function, · V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, REL - relative measurement mode, Hold - stopping the meter reading. Hold - stopping the meter reading and solid construction, · Low battery level alarm         Power supply:       2 x 1.5V, type AA/LR6/FR6 battery - included         Weight:       0.42 kg         Dimensions:       176 x 81 x 48 mm         Manufacturer / Brand:       UNI-T	AC current measurement:  Resistance measurement:	$400 \text{ μA} \pm (1\% + 3) \text{ @ } 0.1 \text{ μA}$ , $4000 \text{ μA} \pm (1\% + 3) \text{ @ } 1 \text{ μA}$ , $40 \text{ mA} \pm (1\% + 3) \text{ @ } 10 \text{ μA}$ , $400 \text{ mA} \pm (1\% + 3) \text{ @ } 0.1 \text{ mA}$ , $400 \text{ mA} \pm (1.2\% + 3) \text{ @ } 1 \text{ mA}$ , $10 \text{ A} \pm (1.2\% + 3) \text{ @ } 10 \text{ mA}$ $400 \Omega \pm (1.2\% + 2) \text{ @ } 0.1 \Omega$ , $4 \text{ kΩ} \pm (0.8\% + 2) \text{ @ } 1 \Omega$ , $40 \text{ kΩ} \pm (0.8\% + 2) \text{ @ } 10 \Omega$ , $400 \text{ kΩ} \pm (0.8\% + 2) \text{ @ } 100 \Omega$ , $400 \text{ kΩ} \pm (0.8\% + 2) \text{ @ } 100 \Omega$ , $400 \text{ kΩ} \pm (1.2\% + 2) \text{ @ } 1 \text{ kΩ}$ , $400 \text{ MΩ} \pm (1.2\% + 2) \text{ @ } 1 \text{ kΩ}$ ,
Frequency measurement:  9.999 Hz 9.999 MHz ± (0.1% + 4) @ 0.001 Hz 0.001 MHz ,  1% 99.9% @ 0.1%  Fundaments	Capacitance measurement:	9.999 nF ± (4% + 10) - in relative measurement mode @ 1 pF , 99.99 nF 999.9 µF ± (4% + 5) @ 10 pF 0.1 nF ,
Frequency measurement:    1 % 99.9 % @ 0.1 %	Inductance measurement:	-
Temperature measurement:  Automatic change of measuring ranges:  FE:  Diode test:  Sound signal of the continuity test:  Checking TTL logic states:  RS-232:  NOV - electric field detection function, - V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, - REL - relative measurement mode, - Hold - stopping the meter reading, - Writing the value MAX / MIN, - Large, readable LCD display with backlight, - Aesthetic and solid construction, - Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	Frequency measurement:	
Automatic change of measuring ranges:  FE:	Square-wave signal duty ratio measurement:	<b>✓</b>
hFE:  Diode test:  Sound signal of the continuity test:  Checking TTL logic states:  RS-232:  -  NCV - electric field detection function, • V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, • REL - relative measurement mode, • Hold - stopping the meter reading, • Writing the value MAX / MIN, • Large, readable LCD display with backlight, • Aesthetic and solid construction, • Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	Temperature measurement:	-
Diode test:  Sound signal of the continuity test:  Checking TTL logic states:  RS-232:  -  NCV - electric field detection function,  - V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz,  - REL - relative measurement mode,  - Hold - stopping the meter reading, - Writing the value MAX / MIN, - Large, readable LCD display with backlight, - Aesthetic and solid construction, - Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	Automatic change of measuring ranges:	~
Sound signal of the continuity test:  Checking TTL logic states:  RS-232:  -  NCV - electric field detection function, • V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, • REL - relative measurement mode, • Hold - stopping the meter reading, • Writing the value MAX / MIN, • Large, readable LCD display with backlight, • Aesthetic and solid construction, • Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	hFE:	-
Checking TTL logic states:  RS-232:  -  NCV - electric field detection function,	Diode test:	~
RS-232:  - NCV - electric field detection function, - V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, - REL - relative measurement mode, - Hold - stopping the meter reading, - Writing the value MAX / MIN, - Large, readable LCD display with backlight, - Aesthetic and solid construction, - Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	Sound signal of the continuity test:	<b>→</b>
• NCV - electric field detection function, • V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, • REL - relative measurement mode, • Hold - stopping the meter reading, • Writing the value MAX / MIN, • Large, readable LCD display with backlight, • Aesthetic and solid construction, • Low battery level alarm  Power supply:  2 x 1.5V, type AA/LR6/FR6 battery - included  Weight:  0.42 kg  Dimensions:  176 x 81 x 48 mm  Manufacturer / Brand:  UNI-T	Checking TTL logic states:	_
<ul> <li>V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz,         <ul> <li>REL - relative measurement mode,</li> <li>Hold - stopping the meter reading,</li> <li>Writing the value MAX / MIN,                  <ul></ul></li></ul></li></ul>	RS-232:	-
Weight: 0.42 kg  Dimensions: 176 x 81 x 48 mm  Manufacturer / Brand: UNI-T	Main features:	V.F.C. function - allows to measure the AC voltage values using low-pass filter with a frequency limit of 400 Hz, REL - relative measurement mode, Hold - stopping the meter reading, Writing the value MAX / MIN, Large, readable LCD display with backlight, Aesthetic and solid construction,
Dimensions: 176 x 81 x 48 mm  Manufacturer / Brand: UNI-T	Power supply:	2 x 1.5V, type AA/LR6/FR6 battery - included
Manufacturer / Brand: UNI-T	Weight:	0.42 kg
	Dimensions:	176 x 81 x 48 mm
	Manufacturer / Brand:	UNI-T
Guarantee: 2 years	Guarantee:	2 years