Code: UT-181A

UNIVERSAL METER **UT-181A** UNI-T

Net: 417.99 EUR Gross: 417.99 EUR

The UT-181A is a universal digital meter used to measure: voltage, current, resistance, capacity, frequency, temperature and checking the correct operation of diodes. The meter has the function of automatic change of measuring ranges, as well as the relative measurement mode.

The device enables the graphical presentation of the trend of changes in the measured value.

SPECIFICATION

DC voltage measurement:	60 mV ± (0.025% + 20) @ 0.001 mV , 600 mV ± (0.025% + 5) @ 0.01 mV , 6 V ± (0.025% + 5) @ 0.0001 V , 60 V ± (0.025% + 5) @ 0.001 V , 600 V ± (0.03% + 5) @ 0.01 V , 1000 V ± (0.03% + 5) @ 0.1 V

AC voltage measurement:	• 60 mV @ 0.001 mV : ± (0.6% + 60) @ 45 Hz ... 1 kHz , ± (1.2% + 60) @ >1 kHz ... 10 kHz , ± (3.0% + 60) @ >10 kHz ... 20 kHz , ± (4.0% + 60) @ >20 kHz ... 100 kHz , • 600 mV @ 0.01 mV : ± (0.3% + 30) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz ± (3.0% + 40) @ >10 kHz ... 20 kHz ± (4.0% + 40) @ >20 kHz ... 100 kHz , • 6 V @ 0.0001 V : ± (0.3% + 30) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz ± (3.0% + 40) @ >10 kHz ... 20 kHz ± (4.0% + 40) @ >20 kHz ... 100 kHz , • 60 V @ 0.001 V : ± (0.3% + 30) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz ± (3.0% + 40) @ >10 kHz ... 20 kHz ± (4.0% + 40) @ >20 kHz ... 100 kHz • 600 V @ 0.01 V : ± (0.3% + 30) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz , ± (3.0% + 40) @ >10 kHz ... 20 kHz , • 1000 V @ 0.1 V : ± (0.6% + 30) @ 45 Hz ... 1 kHz ± (3.0% + 40) @ >1 kHz ... 5 kHz , ± (6.0% + 40) @ >5 kHz ... 10 kHz
DC current measurement:	600 µA ± (0.08% + 20) @ 0.01 µA , 6000 µA ± (0.08% + 10) @ 0.1 µA , 60 mA ± (0.08% + 20) @ 0.001 mA , 600 mA ± (0.15% + 10) @ 0.01 mA , 10 A ± (0.5% + 10) @ 0.001 A
AC current measurement:	• 600 µA @ 0.01 µA : ± (0.6% + 40) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz • 6000 µA @ 0.1 µA : ± (0.6% + 20) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz • 60 mA @ 0.001 mA : ± (0.6% + 40) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz • 600 mA @ 0.01 mA : ± (0.6% + 20) @ 45 Hz ... 1 kHz ± (1.2% + 40) @ >1 kHz ... 10 kHz • 10 A @ 0.001 A : ± (1.0% + 20) @ 45 Hz ... 1 kHz ± (3.0% + 40) @ >1 kHz ... 10 kHz
Resistance measurement:	600 Ω ± (0.05% + 10) @ 0.01 Ω , 6 kΩ ± (0.05% + 2) @ 0.0001 kΩ , 60 kΩ ± (0.05% + 2) @ 0.001 kΩ , 600 kΩ ± (0.05% + 2) @ 0.01 kΩ , 6 MΩ ± (0.3% + 10) @ 0.0001 MΩ , 60 MΩ ± (2.0% + 10) @ 0.001 MΩ
Capacitance measurement:	6 nF ± (3.0% + 10) @ 0.001 nF , 60 nF ± (2.5% + 5) @ 0.01 nF , 600 nF ± (2.0% + 5) @ 0.1 nF , 6 µF ± (2.0% + 5) @ 0.001 µF , 60 µF ± (2.0% + 5) @ 0.01 µF 600 µF ± (2.0% + 5) @ 0.1 µF , 6 mF ± (5.0% + 5) @ 0.001 mF , 60 mF @ 0.01 mF - visual measurement
Inductance measurement:	—

Frequency measurement:	60 Hz ± (0.02% + 8) @ 0.001 Hz , 600 Hz ± (0.01% + 5) @ 0.01 Hz , 6 kHz ± (0.01% + 5) @ 0.0001 kHz , 60 kHz ± (0.01% + 5) @ 0.001 kHz , 600 kHz ± (0.01% + 5) @ 0.01 kHz , 6 MHz ± (0.01% + 5) @ 0.0001 MHz , 60 MHz ± (0.01% + 5) @ 0.001 MHz
Square-wave signal duty ratio measurement:	10 % ... 90 % ± (1.2% + 30) @ 0.01 %
Pulse width measurement:	250 ms ± (1.2% + 30) @ 0.001 ms ... 0.01 ms
Temperature measurement:	• °C -40 ... 40 °C ± (2.0% + 30) @ 0.1 °C >40 ... 400 °C ± (1.0% + 30) @ 0.1 °C >400 ... 1000 °C ± 2.5% @ 0.1 °C, • °F -40 ... 104 °F ± (2.5% + 50) @ 0.1 °F >104 ... 752 °F ± (1.5% + 50) @ 0.1 °F >752 ... 1832 °F ± 2.5% @ 0.1 °F
Automatic change of measuring ranges:	✓
hFE:	–
Diode test:	✓
Sound signal of the continuity test:	✓
Checking TTL logic states:	–
RS-232:	–
USB:	✓
Main features:	• True RMS - accurate measurement of the RMS current and voltage for any waveform, • Freezing the last reading, • Freezing the highest or lowest measurement, • Writing the value peak, • REL - relative measurement mode, • Analog bargraph, • Possibility to save readings, access saved results and send them to a computer using the USB interface, • Large, easy to read LCD graphic display with backlight, • The ability to draw a trend graph of changes in the measured value over time based on the data stored in the device from continuous measurement, • Save to 20000 measurement results in the device memory, • Voltage level measurement (dBV/dBm), • Low battery level alarm, • Aesthetic and solid construction, • The set includes a practical case
Power supply:	Built-in battery 7.4V / 2200mAh, the set includes a 10V / 500mA power supply and a power adapter for charging the battery
Weight:	0.62 kg
Dimensions:	226 x 104 x 63 mm
Manufacturer / Brand:	UNI-T
Guarantee:	2 years

PRESENTATION

Front panel:

Rear view:

Battery:

In the kit:

Device is secured by handy case:

PACKAGE

Dimensions (L x W x H): 0x0x0 mm	Gross Weight: 0 kg