



Patent pending



UT89X Series Digital Multimeters

SPECIFICATIONS

	Range	UT89X	UT89XD
DC voltage (V)	600mV/6V/60V/600V/1000V	±(0.5%+2)	±(0.5%+2)
AC voltage (V)	6V/60V/600V/1000V	±(0.8%+5)	±(0.8%+5)
DC current (A)	60μA/60mA/600mA/20A	±(0.8%+8)	±(0.8%+8)
AC current (A)	60mA/600mA/20A	±(1%+12)	±(1%+12)
Resistance (Ω)	600Ω/6kΩ/60kΩ/600kΩ/6MΩ/60MΩ	±(0.8%+3)	±(0.8%+3)
Capacitance (F)	100mF	±(2.5%+20)	±(2.5%+20)
Frequency (Hz)	10MHz	±(0.1%+4)	±(0.1%+4)
Duty cycle	0.1%~99.9%	±(2%+5)	±(2%+5)
Temperature (°C)	-40°C~1000°C	±(2%+4)	
Temperature (°F)	-40°F~1832°F	±(2%+8)	

Features

Display count	6000	6000
Sampling rate	3 times/s	3 times/s
True RMS	✓	✓
AC voltage frequency response	45~1000Hz	45~1000Hz
AC current frequency response	45~1000Hz	45~1000Hz
Live wire test	✓	
LED test		✓
Audible/visual alarm	V/A/Cap/Diode/hFE/NCV/Live wire (UT89X)/LED (UT89XD)	
Diode/Continuity test	✓	✓
Transistor hFE	✓	✓
Dual range NCV test	✓	✓
Auto power off	✓	✓
Low battery indication	✓	✓
Data hold	✓	✓
Function selection	SELECT	✓

- 1000V AC/DC; 20A AC/DC
- True RMS, 6000 count
- Live wire test (UT89X): Quickly identifies neutral and live wires through light intensity
- LED measurement (UT89XD)
- Audible/visual alarm
- Capacitor charging indicator
- Ergonomic design
- Double injection molding
- 1m drop proof
- Flashlight; auto backlight

Capacitor Measurement

	Fully charged
	Charging in progress

LED Test (UT89XD only)

	Normal LED, forward voltage within 11.1V DC
	LED not working

LED Display Functions	LED off	Green LED	Yellow LED	Red LED
NCV*	< 12VAC	12 ~ 48VAC	48 ~ 220VAC	> 220VAC
LIVE (UT89X only)	< 60VAC			> 60VAC
LED Vf (UT89XD only)		< 11.1VDC		OL
Continuity	OL	Connected (≤ 30Ω)		Disconnected (> 30Ω)
Diode	> 2VDC	Working (0.12 ~ 2VDC)		Breakdown (< 0.12VDC)
Transistor	β = 50	β > 50	β < 50	
Capacitor	< 20pF	Finished charging	Charging	
Voltage	VDC < 1000V VAC < 1000V			VDC ≥ 1000V VAC ≥ 1000V
Current	< 10A			≥ 10A

* The higher the LED flashing frequency, the higher the voltage