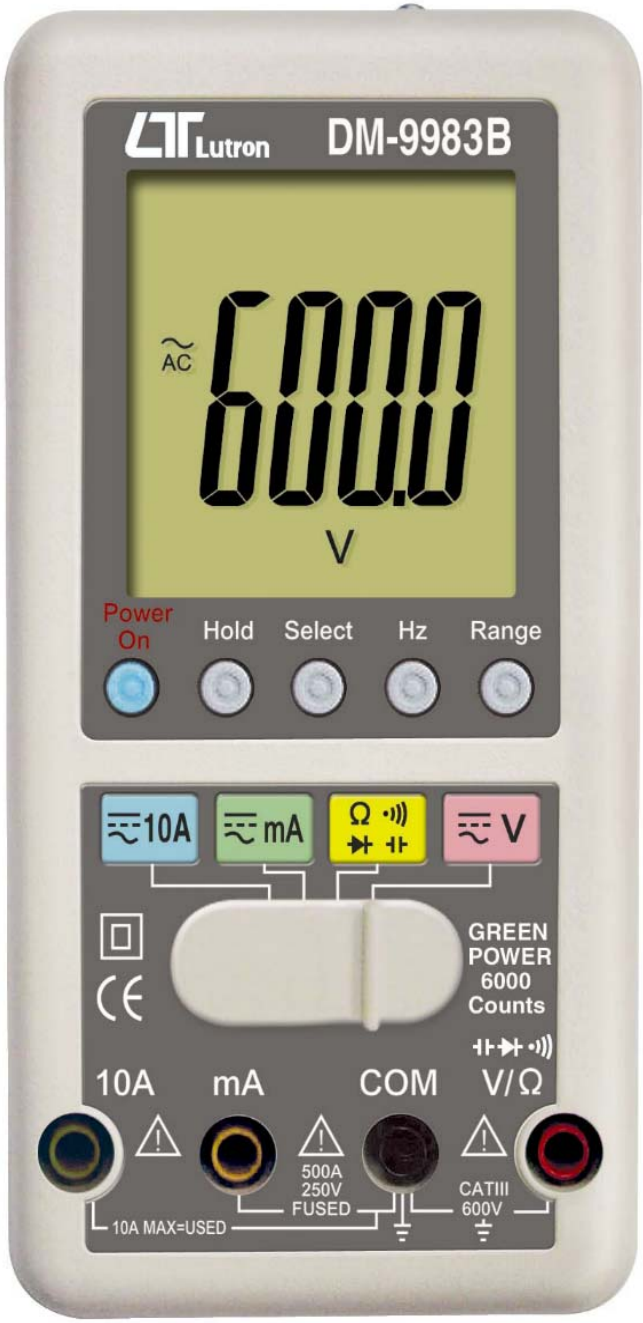
SMART MULTIMETER

Model : DM-9983B *ISO-9001, CE, IEC1010*



Lutron

LUTRON ELECTRONIC

The Art of Measurement

SMART MULTIMETER

Model : DM-9983B

FEATURES

* Digital multimeter with smart function,
* Hybrid power, meter also can supply by the battery.
* Meet CAT III-600 V.
* 6000 counts A/D, high resolution.
* ACV, ACA, DCV, DCA, ohms, continuity, Hz, Capacitance, Diode, Data hold.
* Smart function, Auto range or manual range with hold.
* Smart operation, Build in 4 intelligent function : " V ", " Ω ", " mA ". " 10A ".
* " V " function can select ACV, DCV automatically with auto range.
* " Ω " function can select the Resistance , Diode, Continuity beeper, Capacitance automatically with auto range.
* " 10A " " mA " function can measure ACA, DCA with auto range.
* Data hold (auto range).
* Auto shut off is available to save battery life.
* Both 10 A, mA current range are build fuses for safety consideration.
* 10 M ohm impedance for voltage circuit.
* Built-in overload protection for most ranges.
* LSI circuit provides high reliability and durability.
* Patent.
* Uses durable, long-lasting components, enclosed in strong, light weight ABS-plastic housing.
* Full line optional adapters : Clamp adapter, Tachometer adapter, Pressure adapter, Humidity Adapter, Sound level adapter, Anemometer adapter, Light adapter, EMF adapter.

GENERAL SPECIFICATIONS

Display	46 mm x 45 mm large LCD display.
Measurement	ACV, ACA, DCV, DCA, ohms, continuity beeper, Hz, Capacitance, Diode, Data hold.
A/D counts no.	6000 counts.
Range selection	Smart function, auto range or manual range selecting.
Smart function	" V " function can select ACV, DCV automatically with auto range.
	" Ω " function can select the Resistance, Diode, Continuity beeper, Capacitance automatically with auto range.
	" 10A " " mA " function can measure ACA, DCA with auto range.
Data hold	To freeze the display reading on the LCD display. ** Available for auto range only.*
Power On/Off management	If meter is not operated within 3 minutes will auto power switch off.
Polarity	Automatic Switching, " - " indicates negative polarity.
Zero adjustment	Automatic.
Sampling time	Approx. 0.5 to 1 second.
Operating Temperature	0 to 50 ℃ (32 to 122 ℉).
Operating humidity	Less than 80% RH.
Power supply	006P DC 9V battery.
Power consumption	DC 3 mA approximately.
Weight	340 g/0.75 LB.
Dimension	152 x 78 x 45 mm (6.0 x 3.1 x 1.8 inch)
Accessories Included	Red and Black Test Leads..... 1 Set Instruction Manual..... 1 PC

Optional accessories	Full line adapters : * ACA/DCA current adapter : CA-502, CA-203, CA-501 * ACA current adapter : CA-201 * Pressure adapter : PS-403 * Light adapter : LX-02 * EMF adapter : EMF-824 * Sound level adapter : SL-406 * High voltage probe : HV-40

ELECTRICAL SPECIFICATIONS (23± 5℃)

DC/AC Voltage	*** auto range**
Range	6 V /60 V/600 V
Resolution	0.001 V /0.01 V/0.1 V
Accuracy	DCV : ± (1 % + 2d)
	ACV : ± (1.2 % + 5d)
Input impedance	10 M ohm.
Over load protection	AC/DC 600 V.
Remark	** The input impedance is 10 Mega ohm.* ** ACV specification be tested on sine wave 50/60 Hz.* ** For smart function ,the ACV start measurement voltage is larger than 400 mV ± 100 mV.*

DC/AC Current	*** auto range**	
Range	mA range	600 mA/60 mA
	10 A range	10A
Resolution	mA range	0.1 mA/0.01 mA
	10 A range	0.01 A
Accuracy	mA range	± (1.2% + 2d)
	10 A range	± (1.5% + 2d)
Over load protection	mA range	630 mA fuse
	10 A range	10 A fuse
Remark	** ACA specification be tested on sine wave 50/60 Hz.* ** For smart function ,the ACA start measurement is* 10 A range : 1.50 A. mA range : 1.50 mA.	

OHMS	*** auto range**
Range	600/6 K/60 K/600 K/6 M ohm
Resolution	0.1/1/10/100/1 K ohm
Accuracy	± (1% + 3d)
Over load protection	± 350 DCV, 350 ACV

Capacitance	*** auto range**
Range	6 nF/60 nF/600 nF/6 uF/60 uF
Resolution	0.001 nF/0.01 nF/0.1 nF/0.001 uF/ 0.01 uF
Accuracy	± (3% + 5d)
Remark	*Discharge capacitor before testing.*

Frequency	
Range	40 Hz to 1 KHz.
Resolution	1 Hz.
Accuracy	± (0.3% + 2d)
Input impedance	10 M ohm.
Over load protection	AC/DC 600 V.

Diode
Short/non conductance, good/defect test.

Continuity
If measuring resistance is less than 10 ohm, the beeper will sound .

* Appearance and specifications listed in this brochure are subject to change without notice.