# DMM CAT III 1000V

# Model : DM-9960

## *ISO-9001, CE, IEC1010*







**LUTRON ELECTRONIC** 

#### **FEATURES**

- \* Meet IEC 1010 CAT III 1000 V.
- \* Large LCD display with bar graph indicator.
- \* Multi function measurement. DCV, ACV, DCA, ACA, Resistance, Capacitance, Frequency, Temperature, Diode, Continuity beeper.
- \* Max./Min., Peak value, Relative, Data hold.
- \* Auto range with manual range selection.
- \*  $^{\circ}C/^{\circ}F$  thermometer  $^{\circ}$
- \* VAHz button, when execute the ACV, ACA function also can measure the frequency of signal.
- \* 4000 counts A/D, high resolution.
- \* Build fuse for Both 10 A, mA, uA current range.
- \* 10 M ohm input impedance for voltage circuit.
- \* Full line optional adapters.



#### AUTO RANGE MULTIMETER, CAT III 1000V Model : DM-9960

FEATURES				
* Meet IEC 1010 CAT III 1000 V safety requirement.	* Both 10 A, mA, uA current are build fuse for safefy			
* Large LCD display with bar graph indicator.	consideration.			
* Multi function measurement. DCV, ACV, DCA, ACA,	* 10 M ohm impedance for voltage circuit.			
Resistance, Capacitance, Frequency, Temperature,	* Operates from 2 PCs UM4 1.5 V batteries.			
Diode, Continuity beeper.	* Built-in overload protection for most ranges.			
* Max./Min., Peak value, Relative, Data hold.	* Photo copuple RS 232 computer serial interface.			
* Auto range with manual range selection.	<ul> <li>* Uses durable, long-lasting components, enclosed in</li> </ul>			
* °C/°F thermometer, optional Temp. probe.	strong, light weight ABS-plastic housing.			
* VAHz button, when execute the ACV, ACA function also	* Full line optional adapters : Clamp adapter,			
can measure the frequency of signal.	Tacheometer adapter, Pressure adapter, Humidity			
* 4000 counts A/D, high resolution.	Adapter, Soud level adapter, Anemometer adapter,			
	Light adapter, EMF adapter.			

GENRAL SPECIFICATIONS				
Display	65 mm x 48 mm large LCD display	Zero adjustment	Automatic.	
	with bar graph indicator.	Sampling time	Approx. 0.5 to 1 second.	
Measurement	DCV, ACV, DCA, ACA, Resistance,	Operating	0 °C to 50 °C (32 °F to 122 °F).	
	Capacitance, Frequency, Temperature,	temperature		
	Diode, Continuity beeper.	Operating	Max. 80% RH.	
A/D counts no.	4000 counts.	humidity		
Range selection	Auto range with manual range selecting.	Power supply	1.5 V battery x 2 PCs	
Special function	Max./Min., Peak value, Relative		UM-4/AAA/Micro/R03 type	
	measurement, Data hold.	Power	Approx. DC 2.5 mA.	
Data hold	To freeze the display reading on the	consumption		
	LCD display.	Dimension	185 x 88 x 40 mm (7.3 x 3.5 x 1.6 inch).	
Memory recall	Records Maximum & Minimum readings	Weight	350 g/0.77 LB.	
	with recall.	Accessories	Red and Black Test Leads 1 PC.	
Peak value	To measure the signal peak value.	Included	0.5 Amp Spare Fuse 1 PC.	
Relative	To offset the measurement value.		Instruction Manual 1 PC.	
measurement		Optional	Full line adapters :	
VAHz button	When execute the ACV, ACA function	accessories	ACA/DCA current adapter,	
			adapter, Tachometer adapter,	
	also can measure the frequency of		Humidity adapter, Pressure adapter,	
	signal.		Light adapter, EMF adapter,	
Data output	RS 232 PC serial interface,		Sound level adapter,	
	photo couple.		High voltage probe.	
Polarity	Automatic Switching, " - " indicates		Temperature probe TP-11	
	negative polarity.		RS232 cable UPCB-06	

ELECTRICAL SPECIFICATIONS (23± 5 °C)				
DC Voltage		CAPAITANCE		
Range	400.0 mV / 4 V/ 40 V/ 400 V / 1000 V	Range	4 nF/40 nF/400 nF/4 uF/40 uF/400 uF	
Resolution	0.1 mV /1 mV /10 mV /100m V/1 V		4 mF/40 mF	
Accuracy	± (0.5% + 2d) - 400 mV.	Resolution	1 pF/10 pF/0.1 nF/1 nF/10 nF/0.1 uF	
	± (0.8% + 1d) - 4 V, 40 V, 400 V, 1000 V.		1 uF/10 uF	
Input impedance	10 M ohm.	Accuracy		
Over load	00 DCV, 350 ACV - 200 mV range.	-	± (3 % + 1d)	
protection	000 DCV, 1000 ACV - other ranges.			
AC Voltage				
Range	400.0 mV / 4 V/ 40 V/ 400 V / 1000 V	Frequency		
Resolution	0.1 mV /1 mV /10 mV /100m V/1 V	Range	4 KHz/40 KHz/400 KHz 4 MHz/40 MHz	
Accuracy	± (1% + 2d)	_		
	* Spec. are tested under 50/60 Hz.	Resolution	1 Hz/10 Hz/0.1 KHz/1 kHz/0.01 MHz/0.1 MHz	
Input impedance	10 M ohm.	Accuracy	± (0.5% + 2d)	
Over load	± 500 DCV, 350 ACV - 200 mV range.	OHMS		
protection	± 1000 DCV, 1000 ACV - other ranges.	Range	400/4 K/40 K/400 K/4 M/40 M ohm	
DC Current, AC Current		Resolution	0.1/1/10/100/1 K/10 K ohm	
Range	10 A/400 mA/40 mA/4000 uA/400 uA	Accuracy	400 ohm : ± ( 1 % + 2d )	
Resolution	10 mA/0.1 mA/0.01 mA/1 uA/0.1 uA		4K/40K/400K/4 M : ± ( 1.5 % + 2d )	
Accuracy	400 uA : ± ( 1 % + 2d )		40 M : ± ( 3 % + 5d )	
	4000 uA : ± ( 1.5 % + 2d )	Over load	± 500 DCV, 350 ACV.	
	40 mA : ± ( 1 % + 2d )	protection		
	400 mA : ± ( 1.5 % + 2d )	Temperature		
	400 mA : ± ( 1.5 % + 2d )	Range	-20 ℃ to 750 ℃	
	* ACA spec. are tested under 50/60 Hz.			
Over load	10A range : 10A fuse.	Resolution	1 °C	
protection	uA, mA range : 500 mA fuse.			
Diode (Forward voltage)		Accuracy	-20 $^\circ\mathrm{C}$ to 300 $^\circ\mathrm{C}$ : $\pm$ ( 1% + 2 $^\circ\mathrm{C}$ )	
Range	2 V		301 °C to 750 °C : ± 3% reading	
Accuracy	± (0.5% + 2d)	* The temperature probe is optional.		
Continuity Beep	per			
Beeper will sound	if measured resistance less than 20 hom.			

Beeper will sound if measured resistance less than 20 hom. \* Appearance and specifications listed in this brochure are subject to change without notice.

# **Type K Temperature Probe**

### Model : TP-11

ISO-9001, CE, IEC1010



#### **FEATURES**

- \* Optional temperature probe for DMM, DM-9960.
- \* Type K thermocouple temperature probe.
- \* Measure Rage : -40  $^\circ C$  to 250  $^\circ C$  , -40  $^\circ F$  to 482  $^\circ F.$
- \* Ultra fast response naked-bead thermocouple, general purpose application.





The Art of Measurement