



# 4½ DIGIT DIGITAL MULTIMETER WITH TERMINAL BLOCKING PROTECTION

## FEATURES :

- Low power consumption CMOS double integration, A/D transform integrated circuit
- Auto zero Calibration,
- Auto polarity display,
- Data hold,
- low battery and Over - range indication.
- Test lead jack mechanical protection function and full range over - load protection function.
- Auto power off function

## ACCESSORIES :

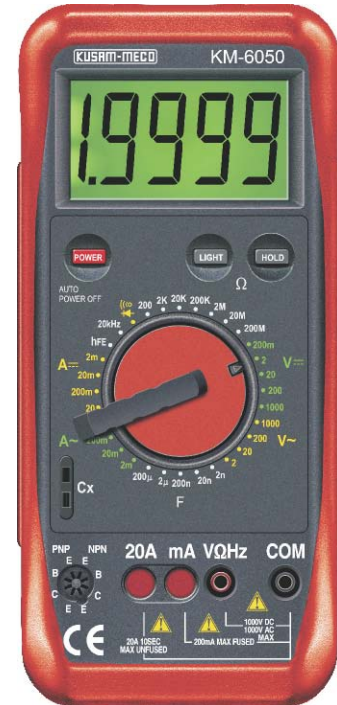
Test lead pair, Carrying case, Holster & User's Manual

## GENERAL SPECIFICATIONS :

- \* Sensing : Average Sensing.
- \* Basic Accuracy :  $\pm 0.05\%$
- \* Capacitance measurement : 0-200 $\mu$ F
- \* Display : 4½ digit 19999 counts Large LCD display
- \* Display Size : 70 x 48mm
- \* Digit Size : 28mm
- \* Low battery indication : " " will occur on the left top of the LCD.
- \* Operation Temperature : 0°C - 50°C; <85% R.H.
- \* Storage Temperature : -10°C ~ 60%; <85% R.H.
- \* Power : Standard 9V battery.
- \* Dimension : 192(L) x 88(W) x 42(H)mm
- \* Weight : approx.400g (including battery and holster)

## 10 FUNCTIONS 30 RANGES

Model - KM 6050



## ELECTRICAL SPECIFICATIONS - KM 6050

Accuracy :  $\pm$  (%reading + digit)

Environment Temperature : 23°C  $\pm$  5°C. Relative Humidity : <75%

### DC VOLTAGE

Range	Resolution	Accuracy
200 mV	10 V	$\pm(0.05\%rdg + 5dgts)$
2 V	100 V	$\pm(0.05\%rdg + 5dgts)$
20 V	1 mV	$\pm(0.05\%rdg + 5dgts)$
200 V	10 mV	$\pm(0.05\%rdg + 5dgts)$
1000 V	100 mV	$\pm(0.1\%rdg + 5dgts)$

Input Impedance : 10M

Overload Protection : 250V (for 200mV) DC or AC peak value.  
1000V (for other ranges)

### DC CURRENT

Range	Resolution	Accuracy
2 mA	100 nA	$\pm(0.5\%rdg + 2dgts)$
20 mA	1 A	$\pm(0.5\%rdg + 2dgts)$
200 mA	10 A	$\pm(0.75\%rdg + 5dgts)$
20 A	1 mA	$\pm(2\%rdg + 10dgts)$

Overload Protection : 0.2A / 250V fuse

Maximum input current : 20A (15 second max.)

Voltage drop measurement : Full-scale Voltage drop : 200mV

### RESISTANCE

Range	Resolution	Accuracy
200	10 m	$\pm(0.2\%rdg + 5dgts)$
2 K	100 m	$\pm(0.2\%rdg + 1dgts)$
20 K	1	$\pm(0.2\%rdg + 1dgts)$
200 K	10	$\pm(0.2\%rdg + 1dgts)$
2 M	100	$\pm(0.2\%rdg + 1dgts)$
20 M	1 K	$\pm(0.5\%rdg + 5dgts)$
200 M	10 K	$\pm(0.5\%rdg + 10dgts)$

Overload Protection : 250V DC or AC peak value

Open circuit Voltage : <1V (2.8V in the 200M range).

Note : It is normal if the test lead short-circuit displays approx. 10 digits in the 200M position.  
Please deduct these 10 digits when measuring.

### AC VOLTAGE

Range	Resolution	Accuracy
2 V	100 V	$\pm(0.8\%rdg + 10dgts)$
20 V	1 mV	$\pm(0.8\%rdg + 10dgts)$
200 V	10 mV	$\pm(0.8\%rdg + 10dgts)$
1000 V	100 mV	$\pm(1.2\%rdg + 15dgts)$

Input Impedance : 2M

Frequency range : 40Hz - 400Hz

Overload Protection : 250V, (for 200mV) DC or AC peak value.  
1000 V (for other ranges)

Display : Average value (Sine RMS)

### AC CURRENT

Range	Resolution	Accuracy
2 mA	100 nA	$\pm(0.8\%rdg + 10dgts)$
20 mA	1 A	$\pm(0.8\%rdg + 10dgts)$
200 mA	10 A	$\pm(1.5\%rdg + 10dgts)$
20 A	1 mA	$\pm(2\%rdg + 10dgts)$

Overload Protection : 0.2A / 250V fuse

Maximum input current : 20A (15 second max.)

Voltage drop measurement : Full-scale Voltage drop : 200mV

Frequency Range : 40Hz - 400Hz

Display : Average value (Sine RMS)

### CAPACITANCE

Range	Resolution	Accuracy
2 nF	0.1 pF	$\pm(2.5\%rdg + 10dgts)$
20 nF	1 pF	$\pm(2.5\%rdg + 3dgts)$
200 nF	10 pF	
2 F	100 pF	
200 F	10 nF	

Frequency measurement : approx. 400Hz

Voltage drop measurement : approx. 40mV

### FREQUENCY

Range	Resolution	Accuracy
20 kHz	1 Hz	$\pm(2\%rdg + 5dgts)$

Overload Protection : 250V DC or AC peak value.

Input sensitivity : 150 mV RMS.

### TRIODE hFE PARAMETER MEASUREMENT

Range	Description
hFE	It can measure NPN or PNP type transistor triode hFE parameter. Indication range: 0-1000

Test Condition : I<sub>b</sub> approx 10 A  
V<sub>ce</sub> approx 2.8V

### DIODE & CONTINUITY MEASUREMENT

Range	Description
	Indicate forward Voltage drop of diode
<b>Test Condition</b>	
Forward-way current is approx 1mA, contray-way voltage is approx 2.8V	
	The buzzer will beep when resistance approx <30
<b>Test Condition</b>	
Open circuit voltage is approx 2.8V	

Overload Protection : 250V, DC or AC peak value.

All Specifications are subject to change without prior notice



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