

4 1/2 DIGIT TRMS BENCH-TYPE DMM WITH PC INTERFACE MODEL- KM 8045

10 FUNCTIONS 36 RANGES



SPECIAL FEATURES :

- 4 1/2 Digit high performance Bench-type DMM, with backlight display.
- It can be used to measure DCV, ACV, DCA, ACA, Resistance, Capacitance, Hz, hFE, Diodes and Continuity.
- The max. Voltage measurement is up to 1000V DC or AC peak value, resolution is 10μV, and current measurement is up to 20A, it also has the function of polarity auto-change, back light display and directly reading.
- For AC measuring, it is performed by high accuracy TRUE RMS, can test the bandwidth of the frequency and the TRUE RMS of any waveform can be accurately measured.

ACCESSORIES :

Test Leads, USB cable, Software CD, Operating Manual, Adapter, Power cord.

GENERAL SPECIFICATIONS :

- * 4 1/2 digit large LCD display with backlight (displaying range : 75 x 40mm), max reading : 19999.
- * Voltage measurement upto 1000V DC and 1000V AC.
- * DC, AC current upto 20A.
- * ACV frequency response : 50kHz.
- * Frequency, Resistance, Capacitance measurement, Triode, Diode test and Continuity test.
- * Manual Range
- * Overload protection : 250V rms.
- * Operating Temperature : 0°C ~ 40°C, <75% R.H.
- * Power supply : 220V / 110V AC
- * Dimension : 260(L) x 220(W) x 82(H)mm
- * Weight : Approx. 1kg.

SAFETY :

KM 8045 adopts double integral A/D converter as its core. KM 8045 designed according to IEC1010 standard.

ELECTRICAL SPECIFICATIONS : KM 8045

Accuracy = ± (reading % + the lowest effective digit) preheating time : 30min. Temperature for accuracy (23 ± 5)°C, R.H.<75%, one year warranted from the production date

AC VOLTAGE (TRUE RMS)

Range	Input frequency	Resolution	Accuracy
200 mV	40Hz ~ 1kHz	10 μV	± (0.7% rdg + 30 dgts)
	1kHz ~ 10kHz		± (2% rdg + 30 dgts)
	10kHz ~ 20kHz		± (3% rdg + 60 dgts)
	20kHz ~ 50kHz		± (10% rdg + 250 dgts)
2 V	40Hz ~ 1kHz	100 μV	± (0.5% rdg + 30 dgts)
	1kHz ~ 10kHz		± (2% rdg + 30 dgts)
	10kHz ~ 20kHz		± (5% rdg + 60 dgts)
20 V	40Hz ~ 1kHz	1 mV	± (0.5% rdg + 30 dgts)
	1kHz ~ 10kHz		± (2% rdg + 30 dgts)
	10kHz ~ 20kHz		± (3% rdg + 60 dgts)
200 V	40Hz ~ 1kHz	10 mV	± (0.5% rdg + 30 dgts)
	1kHz ~ 5kHz		± (2% rdg + 30 dgts)
1000 V	40Hz ~ 200Hz	100 mV	± (0.8% rdg + 10 dgts)
	200Hz ~ 400Hz		± (1.2% rdg + 80 dgts)

Input resistance : 2MΩ for all range.

Overload protection : 200mV range : 250V DC or AC peak value.

Other range : 1000V DC or AC peak value

DC CURRENT

Range	Accuracy	Resolution	Load Voltage
200 μA	±(0.35%rdg + 10dgt)	0.01 μA	1 mV/μA
2 mA		0.1 μA	101 mV/mA
20 mA		1 μA	11 mV/mA
200 mA		10 μA	1.5 mV/mA
2 A	±(0.8%rdg + 10dgt)	100 μA	275 mV/A
20 A		1 mA	42 mV/A

Max. Input current : 20A (within 15s)

Overload Protection : 2A / 250V fuse, 20A / 250V fuse

DC VOLTAGE

Range	Resolution	Accuracy
200 mV	10 μV	±(0.05%rdg + 3dgt)
2 V	100 μV	
20 V	1 mV	
200 V	10 mV	
1000 V	100 mV	±(0.1%rdg + 5dgt)

Input Impedance : 10MΩ for all ranges

Overload Protection : 200mV range : 250V DC or AC peak value.

Other range : 1000V DC or AC peak value

RESISTANCE

Range	Resolution	Accuracy
200 Ω	0.01 Ω	±(0.15%rdg + 20dgts)
2 kΩ	0.1 Ω	
20 kΩ	1 Ω	
200 kΩ	10 Ω	
2 MΩ	100 Ω	
20 MΩ	1 kΩ	±(0.5%rdg + 5dgts)

Open Voltage : less than 1V

Overload Protection : 250V DC or AC peak value

Note : At range 200Ω, short-circuit the test leads to measure the wire resistance & the subtracts it from the real measurement.

hFE MEASURING

Range	Displaying	Test Condition
hFE NPN or PNP	0 ~ 1000.0	Basic current is approx. 10μA, Vce is approx. 3V

All Specifications are subject to change without prior notice

ELECTRICAL SPECIFICATIONS : KM 8045

AC CURRENT (TRUE RMS)

Range	Input Frequency	Accuracy	Resolution	Load Voltage
20 mA	40Hz ~ 400Hz	$\pm(0.8\%rdg + 80dgts)$	1 μ A	11 mV/A
200 mA			10 μ A	1.5 mV/A
2 A			100 μ A	275 mV/A
20 A		$\pm(1.0\%rdg + 50dgts)$	1 mA	42 mV/A

Max. Input voltage drop : 200mV

Max. Input current : 20A (within 15s)

Overload protection : 2A / 275V fused, 13A / 275V fused

CAPACITANCE


Range	Accuracy	Resolution
0nF ~ 10nF	$\pm(3.5\%rdg + 20dgts)$	1 pF
10nF ~ 100nF		10 pF
100nF ~ 1 μ F		100 pF
1 μ F ~ 10 μ F	$\pm(5\%rdg + 30dgts)$	1 nF
10 μ F ~ 100 μ F		10 nF
100 μ F ~ 1mF		100 nF
1mF ~ 2mF		1 μ F

Measuring Range of Accuracy : 10%~100%; Large

Capacitance response time : \geq 1mF about 8s;

Measured error is not including lead distributed capacitance

DIODE & CONTINUITY TEST

Range	Description
	The measuring value is the approx. Value for forward voltage drop. When the resistance under tested is less than 50 Ω \pm 20 Ω , buzzer sounds and display the approx. Value. The open voltage is approx. 3V.

Test Condition : Forward DCA is approx. 1mA, backward DCV is less than 3V

Overload Protection : 250V DC and AC peak value.

FREQUENCY

Range	Accuracy	Resolution
20Hz ~ 200kHz	$\pm(1.0\%rdg + 3dgts)$	0.01Hz ~ 0.1kHz
200kHz ~ 2MHz		0.01kHz ~ 0.001MHz
2MHz ~ 20MHz		0.001MHz ~ 0.01MHz

Input Sensitivity : 1.5V RMS \leq 10V RMS, the reading value is zero for the signal below 3Hz

Overload Protection : 250V DC or AC peak value (within 15s)

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