

4,000 COUNTS AUTORANGING TRUE RMS DIGITAL MULTIMETER

SPECIAL FEATURES :

- Basic Accuracy : 0.5% DCV
- 25ms Max Hold
- Fully Autoranging
- Data Hold
- Relative Zero Mode
- Auto power off
- Jack Beep audible warning against improper plug in
- Diode Test
- Fast audible Continuity Test
- Fire retarded case
- Splash proof construction.
- Backlight Display

GENERAL SPECIFICATIONS

- * Sensing : True RMS sensing AC Voltage & Current.
- * Display : 3-3/4 digits 4000 counts backlight large easy to read LCD display.
- * Update Rate : 3 per second nominal
- * Polarity : Automatic
- * Operating Temperature : 0°C to 40°C
- * Relative Humidity : Maximum 80% R. H. For temperature upto 31°C decreasing linearly to 50% Relative Humidity at 40°C
- * Altitude : Operating below 2000m
- * Pollution degree : 2
- * Storage Temperature : -20°C to 60°C, < 80% R.H. (With battery removed)
- * Temperature Coefficient : nominal 0.15 x (specified accuracy) / °C @ (0°C--18°C or 28°C--40°C), or otherwise specified
- * Low Battery : Below approx 2.4V
- * Power supply : Standard 1.5V AAA Battery x 2.
- * Power Consumption : 3.2mA typical
- * Sleep mode Timing : Idle for 30 minutes
- * Sleep mode Consumption : 360µA typical
- * Dimension : 186(L) x 87(W) x 35.5(H) mm ; 198(L) x 97(W) x 55(H) mm with Holster.
- * Weight : Approx. 296 gms; 396gm with holster.

SAFETY :

- The meter protection rating, against the users, is double insulation per IEC/UL/EN61010-1 Ed.3.0, IEC/EN61010-2-030 Ed.1.0, IEC/EN61010-2-033 Ed. 1.0, IEC/UL/EN61010-031 Ed. 1.1 & CAN/CSA C22.2 No. 61010-1-12 Ed. 3.0 to Category II 1000V, CAT III 600V & CAT IV 300V AC & DC.
- **Transient Protection** : 6kV (1.2/50µs surge)
- **Terminals (to COM) Measurement Category** :
V / A / mAµA : CAT II 1000V, CAT III 600V & CAT IV 300V AC & DC.
- **Overload Protection** :
µA & mA : 0.4A/1000V DC/AC rms, IR 30kA @ 1000V DC/AC rms
A : 11A/1000V DC/AC rms, IR 20kA @ 1000V DC/AC rms
V : 1100V DC/ACrms
Hz, Ohm & Other : 1000V DC/AC rms.
- **EMC** : Meets EN61326-1:2013
In an RF field of 3V/m :
Capacitance function is not specified
AC 4.000V range : Total Accuracy = Specified Accuracy + 700 dgts
AC 400.0µA range : Total Accuracy = Specified Accuracy + 300 dgts
Other function ranges : Total Accuracy = Specified Accuracy + 40 dgts
Performance above 3V/m is not specified.

ACCESSORIES : Test lead (pair), Holster, Battery installed, User Manual & Carrying case.**OPTIONAL ACCESSORIES** : Banana plug type-K bead probe Bkp60 x 1, Banana pins to type-K socket plug adaptor Bkb32.**22 FUNCTIONS 41 RANGES****NEW****Model KM 807s****All Specifications are subject to change without prior notice.**

ELECTRICAL SPECIFICATIONS : KM 807s

Accuracy is \pm (%readings digits + number of digits) or otherwise specified, at 23°C \pm 5°C & less than 75% R.H.

KM 807s True RMS Accuracy of ACV & ACA is specified from 5% (10% for AC400.0mV range) to 100% of range, or otherwise specified.

Maximum Crest Factor <1.75:1 at full scale & <3.5:1 at half scale, & with frequency components within the specified frequency bandwidth for non-sinusoidal waveforms.

DC VOLTAGE

Range	Resolution	Accuracy
400.0 mV	100 μ V	$\pm(0.3\%rdg + 4dpts)$
4.000 V	1 mV	$\pm(0.5\%rdg + 3dpts)$
40.00 V	10 mV	$\pm(0.5\%rdg + 3dpts)$
400.0 V	100 mV	$\pm(0.5\%rdg + 3dpts)$
1000 V	1 V	$\pm(1.0\%rdg + 4dpts)$

Input Impedance : 10M Ω , 30pF nominal
(1000M Ω for 400.0 mV range)

DC CURRENT

Range	Resolution	Accuracy	Burden Voltage
400.0 μ A	0.1 μ A	$\pm(2.0\%rdg + 5dpts)$	0.15mV/ μ A
4000 μ A	1 μ A	$\pm(1.2\%rdg + 3dpts)$	0.15mV/ μ A
40.00mA	10 μ A	$\pm(2.0\%rdg + 5dpts)$	3.3mV/mA
400.0mA	100 μ A	$\pm(1.2\%rdg + 3dpts)$	3.3mV/mA
4.000A	1 mA	$\pm(2.0\%rdg + 5dpts)$	0.03V/A
10.00A*	10 mA	$\pm(1.2\%rdg + 3dpts)$	0.0V/A

*10A continuous, >10A to 20A for 30 seconds max with 5 minutes cool down interval.

AC CURRENT

Range	Resolution	Accuracy ¹⁾	Burden Voltage
50Hz – 500Hz			
400.0 μ A	0.1 μ A	$\pm(2.0\%rdg + 6dpts)$	0.15mV/ μ A
4000 μ A	1 μ A	$\pm(1.5\%rdg + 4dpts)$	0.15mV/ μ A
40.00mA	10 μ A	$\pm(2.0\%rdg + 6dpts)$	3.3mV/mA
400.0mA	100 μ A	$\pm(1.7\%rdg + 4dpts)$	3.3mV/mA
4.000A	1 mA	$\pm(2.0\%rdg + 6dpts)$	0.03V/A
10.00A*	10 mA	$\pm(1.8\%rdg + 4dpts)$	0.03V/A

*10A continuous, >10A to 20A for 30 seconds max with 5 minutes cool down interval.

Hz FREQUENCY

Range*	Accuracy**
50.00Hz	0.5% + 4d
500.0Hz	
5.000kHz	
50.00kHz	
500.0kHz	
1.000MHz	

* Additional 5.000Hz range accuracy & sensitivity are not specified.

** Accuracy is specified at <20VAC rms
Input Signal : Square wave with duty cycle > 40% & <70%, or Sine wave Vrms AC.

Sensitivity :
10Hz–20Hz : > Sine 0.9Vrms ;
20Hz–500kHz : > 2.6Vp; or Sine 1.9Vrms
500kHz–1MHz : > 4.2Vp; or Sine 3Vrms
Update Rate : 2 per second nominal.

AUDIBLE CONTINUITY TESTER

Audible Threshold
between 10 Ω and 120 Ω

DIODE TESTER

Test Current (Typical)	0.25mA
Open Circuit Voltage	<1.6V DC

MAX HOLD (Voltage & Current)

Specified accuracy \pm 50 digits
for changes >25ms in duration

AC VOLTAGE

Range	Resolution	Accuracy
50Hz ~ 500Hz		
400.0 mV*	100 μ V	$\pm(4.0\%rdg + 5dpts)$
4.000 V	1 mV	$\pm(1.5\%rdg + 5dpts)$
40.00 V	10 mV	$\pm(1.5\%rdg + 5dpts)$
400.0 V	100 mV	$\pm(1.5\%rdg + 5dpts)$
1000 V	1 V	$\pm(4.0\%rdg + 5dpts)$

Input Impedance : 10M Ω , 30pF nominal

* Selection by RANGE Button manually, and is specified from AC 10mV & up.

RESISTANCE

Range	Resolution	Accuracy
400.0 Ω	100 m Ω	$\pm(0.8\%rdg + 6dpts)$
4.000 K Ω	1 Ω	$\pm(0.6\%rdg + 4dpts)$
40.00 K Ω	10 Ω	
400.0 K Ω	100 Ω	$\pm(1.0\%rdg + 4dpts)$
4.000 M Ω	1 k Ω	
40.00 M Ω	10 k Ω	$\pm(2.0\%rdg + 4dpts)$

Open Circuit Voltage : 0.4VDC typical.

CAPACITANCE

Range*	Resolution	Accuracy**
500.0nF	0.1 nF	3.5%*** + 6dpts
5.000 μ F	1 nF	
50.00 μ F	10 nF	
500.0 μ F	100 nF	
3000 μ F	1 μ F	

* Additional 50.00nF range accuracy is not specified

** Accuracies with film capacitor or better

*** Specified with battery voltage above 2.8V

(approximately half full battery). Accuracy decreases gradually to 12% at low battery warning voltage of approximately 2.4V.

TYPE-K TEMPERATURE

RANGE	ACCURACY*
-20°C ~ 300°C	2% + 3°C
-4°F ~ 572°F	2% + 6°F

*Type-K Thermocouple range & accuracy not included.

Accuracies assume meter interior and the ambient have reached the same temperature (isothermal stage) for a correct junction voltage compensation. Allow enough settling time for a significant change of ambient temperature. It can take up to an hour for changes > 5°C.

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KUSAM-MECO[®]

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