



3-5/6 DIGIT 6000 COUNTS DIGITAL MULTIMETER WITH EF-DETECTION & PC INTERFACE

SPECIAL FEATURES :

- Autocheck V &
- EF-Detection (NCV)
- 24 Segments Analog Bar-graph
- Crest Mode (Peak Hold), Data Hold function

FEATURES :

- Backlight LCD Display
- Auto Power Off
- Diode & Continuity Test
- Autoranging Relative Zero Mode
- Low Battery Indication
- Wrong Input (test lead) warning detection (w. r. t. switch position)
- Auto-ranging MAX/MIN record
- PC interface (optional)

GENERAL SPECIFICATIONS :

- * **Sensing :** Average Sensing (Model KM 255)
TRUE RMS (Model KM 257)
- * **Display :** 3-5/6 digits 6000 counts LCD display
- * **Update Rate :** Fast Data : 5 per second nominal
24 Segments Analog Bar-graph : 40/second
- * **Operating Temperature :** 0°C to 40°C, at <70% R.H.
- * **Relative Humidity :** Maximum relative humidity 80% for temperature upto 31°C decreasing linearly to 50% relative humidity at 40°C
- * **Storage Temperature :** -20°C to 60°C, <80% R.H.
With battery removed from meter.

- * **Altitude :** 2000m
- * **Pollution Degree :** 2
- * **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. 2.3V
- * **Power Consumption :** 3.5mA
- * **APO Consumption :** 10 A typical
- * **APO Timing :** Idle for 34 minutes
- * **Power Supply :** 1.5V AAA battery x 2
- * **Dimension :** 161(L) X 80(W) X 50(H) mm
- * **Weight :** Approx. 340 gm (with Holster)

20 FUNCTIONS 50 RANGES

Model KM 255/ KM 257



SAFETY :

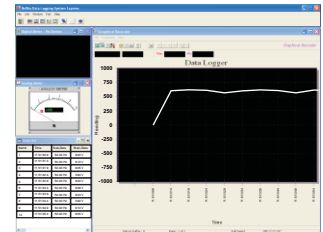
- **Safety :** Double insulation per IEC61010-1 2nd Ed., EN61010-1 2nd Ed., UL61010-1 2nd Ed. & CAN/CSA C22.2 No. 61010.1-0.92 to Category II 1000V, CAT III 600V and CAT IV 300V AC & DC.
- **E. M. C. :** Meets EN61326-1:2006 (EN55022, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11)

In an RF field of 3V/m :
Capacitance function is not specified.
Other function ranges : Total Accuracy =
Specified Accuracy + 100 digits
Performance above 3V/m is not specified.

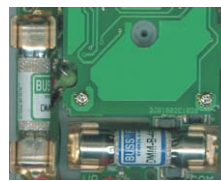
- **Transient Protection :** 6.5kV lightning surge (1.2/50 s)
- **Terminals (to COM) Measurement Category :**
 - V : CAT II 1000 Volts and CAT III 600V and CAT IV 300 Volts AC & DC.
 - mA A : CAT III 500 Volts AC and 300 Volts DC.
 - A : CAT III 600 Volts AC and 300 Volts DC.
- **Overload Protections :**
 - A & mA : 0.63A / 500VAC, IR 150kA, @500V AC
 - A : 10A / 600VAC, IR 100kA, @600VAC
 - V : 1050 Vrms, 1450V peak
 - AutoCheck, mV, & Others : 600Vrms



Software CD



Software



Fuse



Software Cable



Thermocouple



Magnetic Hanger

ACCESSORIES :

Test leads pair, Carrying Case, Batteries installed, User's Manual & Banana plug K-Type Thermocouple

OPTIONAL ACCESSORIES :

PC interface kit, Magnetic Hanger, Banana plug to K-Type socket plug adaptor.
Current Clamp CA300,
Current Clamp Adaptor CA500, CA1000, CA2000,
High Voltage Probe PD-28.

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

True RMS KM 257 ACV & ACA accuracies are specified from 5% to 100% of range or otherwise specified. Maximum Crest Factor <3:1 at full scale & <6: half scale, and with frequency components fall within the meter specified frequency bandwidth for non-sinusoidal waveforms.

DC VOLTAGE

Range	Resolution	Accuracy
60.00 mV	10 V	±(0.2%rdg + 3dgts)
600.0 mV	100 V	
6.000 V	1 mV	
60.00 V	10 mV	
600.0 V	100 mV	
1000 V	1 V	

NMRR : >60dB @ 50Hz / 60Hz
 CMRR : >100dB @ DC 50Hz / 60Hz; Rs=1K
 Input Impedance : 10M , 50pF nominal

AUTOCHECK DCV

Range	Resolution	Accuracy
1.000V to 1000V	1mV ~ 1V	±(1.3%rdg + 3dgts)

AutoCheck Lo-Z DCV Threshold :
 >+ 1.0VDC & <-1.0VDC nominal.
AutoCheck Lo-Z DCV Input Impedance :
 Initially approx. 2.5k , 120pF nominal; Impedance increases abruptly within a fraction of a second as display voltage is above 50V(typical). Ended up impedances vs display voltages typically are :
 15k @ 100V
 100k @ 300V
 250k @ 600V
 375k @ 1000V

AC CURRENT

Range	Resolution	Accuracy	Burden Voltage
50Hz -- 400Hz			
600.0 A	100 nA	±(1.0%rdg + 3dgts)	0.10 mV / A
6000 A	1 A		0.10 mV / A
60.00 mA	10 A		1.7 mV / mA
600.0 mA	100 A		1.7 mV / mA
6.000 A	1 mA		0.03 V / A
8.00 A ¹⁾	10 mA		0.03 V / A

¹⁾ 8A continuous, >8A to 15A for 30 Sec. Max with 5 minutes cool down interval

DC CURRENT

Range	Resolution	Accuracy	Burden Voltage
600.0 A	100 nA	±(0.5%rdg + 3dgts)	0.10 mV / A
6000 A	1 A		0.10 mV / A
60.00 mA	10 A		1.7 mV/mA
600.0 mA	100 A		1.7 mV/mA
6.000 A	1 mA		0.03 V/A
8.00 A ¹⁾	10 mA		0.03 V/A

¹⁾ 8A continuous, >8A to 15A for 30 Sec. Max with 5 minutes cool down interval

AUTOCHECK ACV

Range	Resolution	Accuracy
50Hz / 60Hz		
1.000V to 1000V	1mV ~ 1V	±(1.4%rdg + 5dgts)

AutoCheck Lo-Z ACV Threshold : >1V nominal.
AutoCheck Lo-Z ACV Input Impedance :
 Initially approx. 2.5k , 120pF nominal; Impedance increases abruptly within a fraction of a second as display voltage is above 50V(typical). Ended up impedances vs display voltages typically are :
 15k @ 100V
 100k @ 300V
 250k @ 600V
 375k @ 1000V

AC VOLTAGE

Range	Resolution	Accuracy
50Hz -- 400Hz		
60.00 mV	10 V	±(1.0%rdg + 5dgts)
600.0 mV	100 V	
6.000 V	1 mV	
60.00 V	10 mV	
600.0 V	100 mV	
1000 V	1 V	

CMRR : >60dB @ DC to 60Hz, Rs=1K
 Input Impedance : 10M , 50pF nominal

HZ(LINE) @ ACV, DCV, CURRENT & AUTOCHECK

Range	Resolution	Accuracy
6 V	0.4 V	10Hz - 100kHz
60 V	4 V	10Hz - 100kHz
600 V	40 V	10Hz - 100kHz
1000 V	400 V	45Hz - 1kHz
600 A	40 A	10Hz - 100kHz
6000 A	400 A	10Hz - 100kHz
60 mA	4 mA	10Hz - 100kHz
600 mA	40 mA	10Hz - 100kHz
6 A	1 A	10Hz - 1kHz
10 A	6 A	10Hz - 1kHz

Accuracy : 0.03%+3d

CREST MODE

Accuracy	Specified accuracy plus 150 digits for changes > 5ms in duration.
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RECORD MODE

Accuracy	Specified accuracy plus 100 digits for change >100ms in duration.
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AUDIBLE CONTINUITY TESTER

Audible Threshold :	Between 10 and 80
Response time :	32ms

OHMS

Range	Resolution	Accuracy
600.0	100 m	±(0.5%rdg + 4dgts)
6.000 k	1	
60.00 k	10	
600.0 k	100	±(0.7%rdg + 4dgts)
6.000 M	1 k	
60.00 M	10 k	

Open Circuit Voltage : 0.45VDC typical.

CAPACITANCE

Range	Resolution	Accuracy
60.00 nF	10 pF	±(2.0%rdg + 5dgts)
600.0 nF	100 pF	
6.000 F	1 nF	±(1.5%rdg + 5dgts)
60.00 F	10 nF	
600.0 F	100 nF	±(2.0%rdg + 5dgts)
3000 F	1 F	

Accuracies with film capacitor or better

LOGIC LEVEL Hz (mV FUNCTION)

Range	Sensitivity (square wave)	Accuracy
5.00 Hz to 500.0 kHz	3 Vpeak	±(0.03%rdg + 2dgts)
5.00 Hz to 1.000 MHz	5 Vpeak	±(0.03%rdg + 2dgts)

DIODE TESTER

Range	Resolution	Accuracy
1.000 V	100mV	±(1.0%rdg + 3dgts)

Test Current : 0.56mA typical.
 Open Circuit Voltage : <1.8VDC typically.

NON-CONTACT EF-DETECTION

Typical Voltage	Bar-Graph Indication
20V (tolerance: 10V~36V)	—
55V (tolerance: 23V~83V)	— —
110V (tolerance: 59V~165V)	— — —
220V (tolerance: 124V~330V)	— — — —
440V (tolerance: 250V & 1000V)	— — — — —

Indication : Bar-graph segments & audible beep tones proportional to the field strength
Detection Frequency : 50/60Hz
Detection Antenna : Top-right end of the meter
Probe-Contact EF-Detection : For more precise indication of live wires, such as distinguishing between live & ground connections, use the Red(+) test probe for direct contact measurements.

AUTOCHECK OHM

Range ¹⁾	Resolution	Accuracy
00.00 to 60.00M	10m to 10k	±(1.2%rdg + 10dgts)

Open Circuit Voltage : 0.45VDC typical.
¹⁾ AutoCheck Ohm Threshold : < 10.00M nominal

All specifications are subject to change without prior notice.