

FEATURES :

- Touch Pad operation.
- 6000 counts Dual display.
- IP65 waterproof
- CAT III 1000V / CAT IV 600V
- Auto backlight
- 2 colour backlight for various status indication.
- Manual range and Autorange mode
- Max/Min function
- Relative measurement mode.
- Memory Mode
- Review the data & clear the data function.
- Auto Power Off
- Automatic lock touchpad
- Test lead plug indication
- Red Backlight Alarm
- Ambient Temperature measurement
- PT100 / PT1000 Temperature Measurement
- 4-20mA%, 0-24mA%, 0-20mA% measurement.
- Sub-display frequency measurement.

GENERAL SPECIFICATIONS :

- * Display : 3-5/6 digits LCD display. Automatic indication of functions & symbols.
- * Pollution Degree : 2
- * Altitude : < 2000m
- * Operating Temperature : 0~40°C, 32°F ~ 122°F (<80% RH, <10 non-condensing)
- * Storage Temperature : -10~60, 14°F ~ 140°F (<70% RH, battery removed)
- * Temperature Coefficient : 0.1 x (specified accuracy) / °C (<18°C or >28°C)
- * MAX. Voltage between terminals & earth ground : 1000V AC rms or 1000V DC.
- * Fuse Protection : μA & mA : F 0.63A/1000V \varnothing 10.3 x 38;
A : F 10A/1000V \varnothing 10.3 x 38
- * Sample Rate : 3 times/sec for digital data.
- * Over Range Indication : LCD will display "OL"
- * Low battery indication : The "E3" is displayed when the battery is below the proper operation range.
- * Polarity indication : "-" automatically displayed.
- * Power / Battery : 3VDC, 1.5V AA x 2
- * Dimension : 190(L) x 90(W) X 40(H) mm
- * Weight : 500g. approx.(battery included).

ACCESSORIES : Users Manual, Test Leads, "K" type Thermocouple, Battery & Carrying case.



Preliminary Data

SAFETY : Complies with IEC 61010-1, CAT III 1000V & CAT IV 600V over voltage standards.

ELECTRICAL SPECIFICATIONS : KM 60

Accuracy is specified for one year after calibration, at operating temperatures of 18°C to 28°C, with relative humidity at less than 80%. Accuracy is \pm (% of reading + number of Significant digits)

DC VOLTAGE

Range	Resolution	Accuracy
60 mV	0.01 mV	$\pm(0.1\%rdg + 5dgt)$
600 mV	0.1 mV	$\pm(0.1\%rdg + 2dgt)$
6 V	1 mV	$\pm(0.15\%rdg + 2dgt)$
60 V	10 mV	
600 V	100 mV	
1000 V	1 V	

DC CURRENT

Range	Resolution	Accuracy
600 μA	0.1 μA	$\pm(1.0\%rdg + 3dgt)$
6000 μA	1 μA	
60 mA	0.01 mA	
600 mA	0.1 mA	$\pm(1.5\%rdg + 5dgt)$
6 A	1 mA	
10 A	10 mA	

DIODE TEST

Range	Resolution	Test Condition
3V	0.001V	Forward DC Current approximately 1mA. Reversed DC Voltage approximately 3V.

CONTINUITY CHECK

Range	Resolution	Test Condition
600 Ω	0.1 Ω	Open Circuit Voltage: 0.5V

Continuity Beeper \leq 50 Ω

All Specifications are subject to change without prior notice.

ELECTRICAL SPECIFICATIONS : KM 60

AC VOLTAGE

Range	Resolution	Accuracy
60 mV	0.01 mV	$\pm(0.8\%rdg + 10dgts)$
600 mV	0.1 mV	$\pm(0.8\%rdg + 3dgts)$
6 V	1 mV	
60 V	10 mV	
600 V	100 mV	
1000 V	1 V	$\pm(0.8\%rdg + 5dgts)$

Above accuracies can be guaranteed within 5% ~ 100% of the full range.

The TRMS meter has residual value within 10 counts when the test leads are shorten, but that will not affect the accuracy of measurement.

- Frequency Range for AC Voltage :** 40Hz ~ 400Hz.
- Response for AC Voltage :** RMS, calibrated in rms of sine wave.
- Overload Protection :** 1000V DC or 1000V AC rms.
- Input Impedance (Nominal) :** DC / AC voltage : > 10M Ω
- <100 counts Frequency will not display.
(@60mV range < 30.00mV)

AC CURRENT

Range	Resolution	Accuracy
600 μ A	0.1 μ A	$\pm(1.8\%rdg + 5dgts)$
6000 μ A	1 μ A	
60 mA	0.01 mA	
600 mA	0.1 mA	
6 A	1 mA	$\pm(2.0\%rdg + 8dgts)$
10 A	10 mA	

Above accuracies can be guaranteed within 5% ~ 100% of the full range.

The TRMS meter has residual value within 10 counts when the test leads are shorten, but that will not affect the accuracy of measurement.

- Frequency Range for AC Current :** 40Hz ~ 400Hz.
- Overload Protection :** F 10A /1000V fuse for 10A
Overload Protection : F 0.63A /1000V fuse for μ A & mA ranges.
- Maximum Input Current :** 600mA DC or 600mA AC rms for μ A & mA ranges, 10A DC or 10A AC rms for 10A ranges.
- For measurements >6A, 4 minutes maximum ON to measure 10 minutes OFF, above 10A unspecified.

RESISTANCE

Range	Resolution	Accuracy
600.0 Ω	0.1 Ω	$\pm(0.5\%rdg + 3dgts)$
6.000 k Ω	1 Ω	
60.00 k Ω	10 Ω	
600.0 k Ω	100 Ω	
6.000 M Ω	1 k Ω	
60.00 M Ω	10 k Ω	$\pm(1.5\%rdg + 5dgts)$
PT100	0.4 $^{\circ}$ C	-200~850 $^{\circ}$ C $\pm(1.0\%rdg + 1^{\circ}$ C)
PT1000	0.4 $^{\circ}$ C	

LOGIC FREQUENCY (1Hz ~ 1MHz)

Range	Resolution	Accuracy
9.999Hz	0.001Hz	$\pm(0.1\%rdg + 3dgts)$
99.99 Hz	0.01Hz	
999.9 Hz	0.1Hz	
9.999kHz	0.001kHz	
99.99kHz	0.01kHz	
999.9kHz	0.1kHz	

CAPACITANCE

Range	Resolution	Accuracy
6.000nF	1pF	$\pm(3.0\%rdg + 10dgts)$
60.00nF	10pF	
600.0nF	100pF	$\pm(5.0\%rdg + 10dgts)$
6.000 μ F	1nF	
60.00 μ F	10nF	
600.0 μ F	100nF	
6.000mF	1 μ F	$\pm(8.0\%rdg + 20dgts)$
60.00mF	10 μ F	$\pm(10\%rdg+30dgts)$ typical

LINEAR FREQUENCY (6Hz ~ 10KHz)

Range	Resolution	Accuracy
99.99Hz	0.01Hz	$\pm(0.05\%rdg + 5dgts)$
999.9Hz	0.1Hz	
9.999kHz	0.001kHz	
Above accuracies can be guaranteed with 10% ~ 100% of the full range		

K-TYPE THERMOCOUPLE TEMPERATURE

Range	Resolution	Accuracy
-200 $^{\circ}$ C ~ 0 $^{\circ}$ C	0.1 $^{\circ}$ C	$\pm(3.0\%rdg + 3^{\circ}$ C)
1 $^{\circ}$ C ~ 400 $^{\circ}$ C		$\pm(2.0\%rdg + 3^{\circ}$ C)
401 $^{\circ}$ C ~ 1000 $^{\circ}$ C	1 $^{\circ}$ C	$\pm 2.0\%rdg$

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