

## 15KV HIGH VOLTAGE INSULATION RESISTANCE TESTER

### APPLICATION

For Testing The Insulation Resistance Of Cables, Motors, Generators, Transformers, Insulators, High-pressure Switches, Wiring Installations.... etc.

### FEATURES :

- Microprocessor controlled Menu Driven.
  - Test Insulation Resistance upto  $30T\Omega$  ( $30000G\Omega$ )
  - Test Insulation Voltage upto 15kV.
  - Short circuit current upto 5mA.
  - Measuring 30 Insulation Test Voltage Ranges:  
500V, 1kV, 1.5kV, 2kV, 2.5kV, 3kV, 3.5kV, 4kV, 4.5kV, 5kV, 5.5kV, 6kV, 6.5kV, 7kV, 7.5kV, 8kV, 8.5kV, 9kV, 9.5kV, 10kV, 10.5kV, 11kV, 11.5kV, 12kV, 12.5kV, 13kV, 13.5kV, 14kV, 14.5kV, 15kV.
  - AC / DC Voltage : 600V.
  - PI & DAR indication.
  - Auto-ranging on all insulation ranges.
  - 2 Lines X 16 Characters large LCD Backlight display.
  - Bargraph indicates test Voltage, rise & decay can be observed.
  - Visual & audible warning if external voltage is present. ( $\geq 30Vac$  or  $\geq 30Vdc$ )
  - Auto-hold function to freeze the reading.
  - Overload Protection
  - Adjustment for testing time (duration) : 1 ~ 30 minutes
  - Auto-off.
  - Calendar
  - Optical USB to RS-232 data transmission.
  - 200 measurement results can be saved in the memory & recalled on the display.
  - Safety Standard : EN61010-1 CAT IV 600V
- EN61010-2-030; EN61326-1

### INSTRUMENT LAYOUT

1. Power ON/OFF Button
2. Insulation Resistance Test at 1kV button
3. Insulation Resistance test at 5kV button
4. Insulation Resistance test at 10kV button
5. Insulation resistance test at 15kV button
6. To add (+500V) button to the selected test voltage
7. To subtract (-500V) button to the selected test voltage
8. TEST / STOP Button
9. ENTER & SAVE Button
10. ESC button
11. BACKLIT button
12. CA-232 connection socket
13. Battery-charge socket
14. Charge indicator

### MODEL KM 7016IN

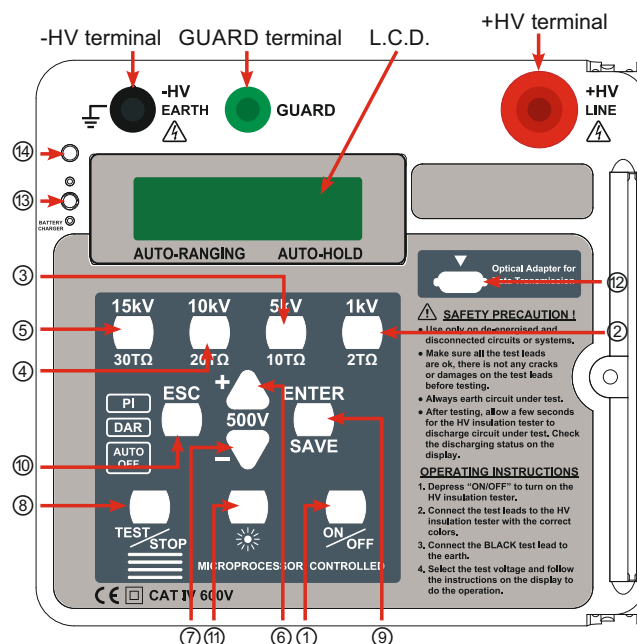
**NEW**

**CAT IV  
600V**

**Short  
Circuit Current  
5mA**



Preliminary Data



Note: All Specification are Subject to change without prior notice.

## \* ELECTRICAL SPECIFICATIONS :

- **Test voltage** : From 500Vdc to 15kVdc  
Adjustable in 500V steps
- **Preset buttons** : 1kV, 5kV, 10kV, 15kV
- **Insulation resistance** : 1000GΩ/0.5kV  
1000GΩ at 0.5kV ~ 30TΩ at 15kV
- **Accuracy** :  
1kV: 0~200GΩ  
5kV: 0~1TΩ  
10kV: 0~2TΩ      ±(5%rdg+5dgt)  
15kV: 0~3TΩ  
  
1kV: 200GΩ~2TΩ  
5kV: 1TΩ~10TΩ  
10kV: 2TΩ~20TΩ      ±20%  
15kV: 3TΩ~30TΩ
- **Resolution** :  
1GΩ : 0.001GΩ  
10GΩ : 0.01GΩ  
100GΩ : 0.1GΩ  
1000GΩ : 1GΩ  
10TΩ : 10GΩ  
30TΩ : 100GΩ
- **Short circuit current** : up to 5mA
- **PI (Polarization Index)** : yes
- **DAR (Dielectric Absorption Ratio)** : Yes
- **Voltmeter** : ACV : 30~600V (50/60Hz)  
DCV : 30~600V  
Accuracy : ±(2.0%rdg+3dgt)  
Resolution : 1V
- **Current** : 0.5nA ~ 0.55mA
- **Measurement** : (Depending on the insulation resistance)
- **Power source** : Rechargeable battery
- **Adapter** : Input : 100-240Vac, 0.4A, 50-60Hz  
Output : 24Vdc, 0.62A
- **Dimensions** : 430(L) x 324(W) x 127(D)mm
- **Weight** : Approx : 6.56kg
- **Accessories** : Instruction manual  
Test leads (AL-58, AL-30AG,AL-30HB)  
Data transmission cable CA-232  
Compact disk (CD) for PC interface  
Alligator clip (AL-23CA)  
Charger (CHA-7015)

## \* SPECIAL FUNCTIONS

### Voltmeter

When testing insulation resistance while there is a presence of voltage (whether ACV or DCV) on the measured object, conventional insulation testers are highly susceptible to damage. With this new line of insulation testers, it has the ability to switch to voltage detection mode without damaging the instrument once it detects the presence of voltage. It will also display the voltage finding on the LCD screen. With this new and unique function, it will allow the user to safely rule out the possibility of any presence of voltage on the measured object prior to measuring its insulation.

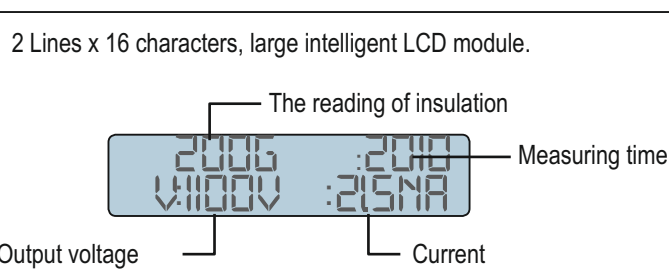
### DAR = Dielectric Absorption Ratio

The dielectric absorption ratio is the ratio of the insulation resistance measured at 1 min divided per the insulation resistance measured at 30 seconds. after starting a test, the tester will beep, indicating the operator that the resistance value measured at 30 seconds now has been saved internally. 1 minute after starting a test, the tester will beep again, indicating the user that the DAR result is now computed, and change the display the DAR result.

### PI = Polarization Index

The polarization index or PI is the ratio of the insulation resistance measured at 10 minutes divided per the insulation resistance measured at 1 minute. 10 minutes after starting a test, the tester will beep again, indicating the user that the PI result is now computed, and change the display format to now display the PI result.

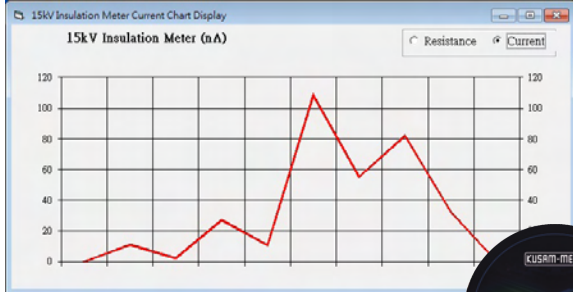
### Display



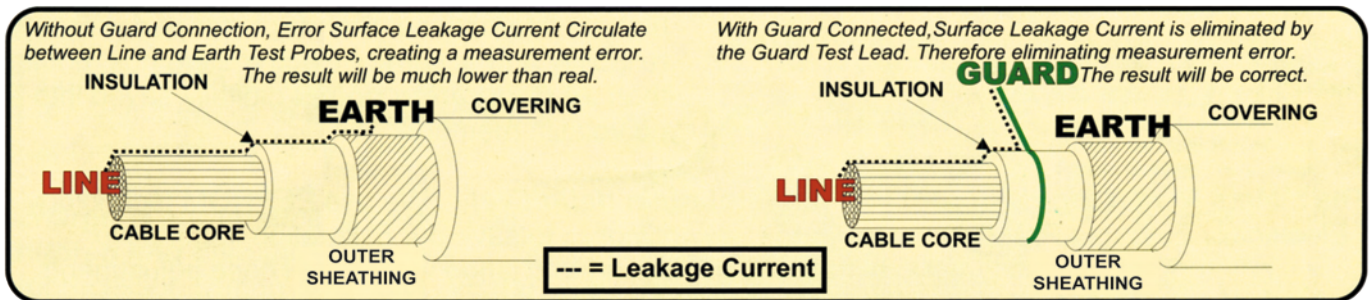
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## Data Communication Function

- Downloading saved data to a PC.
- Transferring and showing real-time data to a PC.
- 200 measurement results can be saved in the memory and recalled on the display.



## Measure the insulation of cable



A complete set of accessories : H.V test leads ( AL - 30AG AL - 30HB), Alligator clip (AL - 23 CA). H.V. Line probe with (AL - 58), Data transmission cable (CA - 232), Charger (CHA - 7015), Compact disk (CD), Instruction manual.

## Accessories



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