

Digital (Up to 10kV) Insulation Tester



6213A IN

FEATURES

- **Microprocessor-controlled.**
- 2 × 16 characters; large intelligent LCD module.
- 20 Insulation test voltages 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.
- Ener-Save™ feature to extend battery life.
- Bar-graph indicates test voltage; rise and decay can be observed.
- Visual and audible warning if external voltage is present (>500Vac or Vdc.)
- Insulation resistance; auto-ranging on all ranges.
- Overload protection.
- Low battery indicator (read time battery voltage measurement).
- Measures insulation time duration of the test.
- Low battery consumption.
- Better than 10% accuracy on all ranges.
- Auto-off.
- Calculates Dielectric Absorption Ratio (DAR) automatically.
- Calculates Polarization Index (PI) automatically.

SPECIFICATIONS

Test voltage	From 500Vdc to 10kVdc Adjustable in 500V steps
Preset buttons	1kV / 2.5kV / 5kV / 10kV
Measuring ranges	800kΩ-500GΩ (auto-ranging)
Accuracy	± 5% ± 2 digits
Output power limit	1W Selected voltage +20%-5% of nominal value unless current limited.
Voltage regulation	Meaning that if output current is too high, the voltage will be lowered automatically.
Dimensions	330(L) × 260(W) × 160(D)mm
Weight (battery included)	Approx. 3600g
Power source	1.5V "C" × 8 Alkaline batteries
Safety standard	EN 61010-1 CAT III 300V EN 61326-1
Accessories	Instruction manual Color coded flexible silicone test leads Alkaline batteries

SPECIAL FEATURES

●DAR (Dielectric Absorption Ratio)

The Dielectric Absorption Ratio is the ratio of the insulation resistance measured at 1 minute divided by the insulation resistance measured at 30 seconds.

Thirty seconds after starting a test (with Ener-Save™ disabled), the tester will beep, indicating that the resistance value measured at 30 seconds has been saved.

One minute after starting a test, the tester will beep again, indicating that the DAR result has been computed. The display format then changes to display the DAR result.

●PI (Polarization Index)

The Polarization Index is the ratio of the insulation resistance measured at 10 minutes divided by the insulation resistance measured at 1 minute.

One minute after starting a test, the resistance value is saved and the DAR is displayed. The test then continues, and after 10 minutes (with Ener-Save™ disabled), the tester will beep again, indicating that the PI result has been computed. The display format changes to display the PI result. The tester will Auto-Stop at 10 minutes.

●Digital Display

The digital Liquid Crystal Display is large. It measures 98mm(W) × 24mm(D) and has 2 lines of 16 characters each. Language can be changed at the factory at the time of order.

●Automatic Battery Test

When the tester starts, it tests its batteries by drawing a heavy current from the batteries. During this heavy current, the 6213A IN measures battery voltage and displays it momentarily on the LCD.

During normal use, the tester continues to monitor the battery voltage, but without drawing a battery test current.

●Automatic Discharge of Capacitive and Inductive Circuits

The 6213A IN will automatically discharge all circuits charged by the tester after a test is complete.

However, the discharge will only occur if the test leads make contact continuously before, during and after the test.

It's the user's responsibility to ensure proper contact of the leads at all times.

Once a test is finished, the 6213A IN will automatically discharge capacitive or inductive circuits of their charges. The discharge can be observed on the display, in the form of a bar-graph. A buzzer will also sound during the discharge. Again, do not disconnect the leads while discharging.

Wait until completion of the discharge before removing any lead. With high voltage charges, this may take some time. Be patient and let the instrument discharge completely before removing the leads.