

Features

- Protection class: IP65 (Lid closed).
- 2 Lines × 16 Characters LCD.
- Microprocessor-controlled.
- Tests insulation resistance up to 2 TΩ.
- 4 Insulation test voltages: 1000V, 2500V, 5000V, 10000V.
- AC / DC Voltmeter (30~600V).
- Short-circuit current up to 5mA.
- PI (Polarization Index) indication.
- DAR (Dielectric Absorption Ratio) indication.
- Auto-ranging on all insulation ranges.
- Auto-hold function to freeze reading.
- Overload protection.
- Adjustable testing duration: 1~30 minutes.
- Internal memory for data storage.
- Displays testing duration for insulation measurement.
- Auto-off function.
- 200 measurement results can be saved in memory and recalled on display.

IP65

CE



Specifications

Test Voltage:	1000V, 2500V, 5000V, 10000V.
Insulation resistance:	200GΩ / 1000V, 500GΩ / 2500V, 1TΩ / 5000V, 2TΩ / 10000V.
Accuracy:	±(5.0%rdg + 5dgt).
Resolution:	1000MΩ: 1MΩ, 10GΩ: 0.01GΩ, 100GΩ: 0.1GΩ, 1TΩ: 1GΩ, 2TΩ: 10GΩ.
Short circuit current:	up to 5mA.
PI (Polarization Index):	√
DAR (Dielectric Absorption Ratio):	√
Voltmeter:	ACV: 30~600V(50/60Hz) / DCV: 30~600V Accuracy: ±(2.0%rdg + 3dgt) Resolution: 1V.
Current measurement:	0.5nA ~ 0.55mA (Depending on the insulation resistance).
Power source:	1.5V "C" × 8 Alkaline batteries. DC3V (CR2032) × 1.
Dimensions:	250(L) × 190(W) × 127(D)mm.
Weight Approx.:	2070g.
Safety standard :	IEC / EN 61010-1 CAT IV 600V. IEC / EN 61010-2-030. EN 61326-1.
Accessories:	Instruction manual. Test leads. Alligator clips. Carry case. Batteries. Shoulder belt.



Special Functions

Voltmeter

Conventional insulation testers are highly susceptible to damage when testing insulation resistance while voltage is present on the measured object (whether ACV or DCV).

To safely prevent damage, this new line of testers has the unique ability to sense voltage on a measured object.

If any voltage is sensed, the tester will automatically switch to voltage detection mode and display the voltage finding on the LCD screen.

This allows the user to prevent damage caused by attempting to measure insulation resistance while voltage is present.

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.

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 format to now display the DAR result.

$$\text{DAR} : \frac{1\text{-min insulation resistance}}{30\text{-sec insulation resistance}}$$



AL-58



AL-30AG, .AL-30HB



AL-23CA



BET-2800

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.

$$\text{PI} : \frac{10\text{-min insulation resistance}}{1\text{-min insulation resistance}}$$

Tests on lower insulation resistance take longer, which tends to deteriorate the test specimen. Thus, higher DAR or PI readings (closer to 1) would indicate a better grade of insulation.



Carry case