

S430 Diagnostic Insulation Tester



FEATURES

Measuring insulation resistance to 10 TΩ;
Automatic calculation of Dielectric Absorption (DAR) and Polarization Index (PI)
Noise filtering/rejection
DD, SV, and DC/AC Voltage test function
Capacitance and leakage current test
Test voltages in 10 V steps from 250 V to 1000 V, and 20V or 30V steps from 2.5KV to 5KV.
Compact and lightweight with a waterproof design.

GENERAL SPECIFICATION



Functions	Insulation Resistance, Current Value, Capacitance Value, Polarization Index, Dielectric Absorption Ratio, Automatic Discharge, DD, SV, External Voltage Test; Ambient Temperature Display, Filter, Time, Data Retention
Power	DC 14.8 V, 5200mAh rechargeable Li-Battery, approx. 16.8 V in fully charged status
Test Voltage	250V, 500V, 1000V, 2500V, 5000V
Voltage Measurement	AC/DC up to 1000V
Short Circuit Current	≥5mA
Connections	<p>L terminal: High Voltage Terminal. Connect one end of the test leads to the L terminal, and the other end should be connected/clamped on to the device under test.</p> <p>G terminal: Guard Terminal, it is used to provide a return path for surface leakage current and minimize its effect on the results.</p> <p>E terminal: Earth Terminal, usually connected to the ground or neutral terminal of the measured object.</p>
Time	Max: 99min and 99seconds, depending on the test method, adjustable
Step Voltage	100V to 1.00kV, 10V Step; 2.50kV to 5.00kV, 20V and 30V Step
Resolution	Insulation Resistance: 0.01MΩ Test Current: 0.01nA
Capacitance test	Range: 0.200μF to 100.0μF Accuracy: ±20%±0.005μF

Backlight	Adjustable backlight, high, medium, low brightness
Test Range	Press the button to set
LCD	5.6 bit Color LCD
Test Indication	While testing, an LED light will flash, and the buzzer will sound.
Charging Indication	A red light indicates that charging is in process; A green light indicates that the battery is fully charged.
Battery Voltage	--OL--
Data Storage	Data is automatically saved upon the completion of the test, up to 1000 sets of data, including the current test data, ambient temperature, date and time and other information.
Data View	Use the buttons to select Data View option on the main menu, and use the arrows to browse through the data.
Automatic shut-down	Instrument will automatically shut down without operation in 15 minutes.
Standard Test Leads	1 red, 1 green and 1 black test lead with clip.
Battery Voltage	Display the remaining battery in real time. Please charge in a timely manner when the battery is low. No output voltage for testing when the battery is low.
Date	Date is displayed at the top of the screen.
Ambient Temperature	Ambient temperature is displayed at the top of the screen.
Ambient humidity	Ambient humidity is displayed at the top of the screen.
Dimensions	320mm(L) ×240mm (W)×145mm(H)
Weight	Approximately 3.25kg (battery included)
Data Transmission	Computer Software:Download data through the USB port; App: Connect the Bluetooth to export data
Communication Interface	USB port, the saved data can be uploaded to the computer for saving or printing.
Cloud Service	Android APP, Bluetooth connection; upload on-site pictures, upload test data, generate test reports, generate data curves, multiple people view data at the same time, export data (in Excel format)
Cloud Service	Export instrument test data, continuously record data, and display test data in real time
Communication Lines	USB cable, 1.5m in length
Working Temperature and Humidity	-10°C to 50°C; no condensations when below 90% RH
Storage Temperature and Humidity	-20°C to 60°C ; no condensation when below 90% RH,
Withstand Voltage	AC 5kV 50Hz ,1min between test leads and the housing.
Dielectric Strength	Above 500 MΩ between the test leads and the housing.
EMC	IEC61326(EMC)
Safety Standards	CAT IV 600V

INSULATION RESISTANCE MEASUREMENT RANGE AND ACCURACY

Output Voltage	Range	Accuracy
100V (10%) DC	0.01MΩ to 5.00GΩ	±3%rdg±5dgt
	5.00GΩ to 200GΩ	±15%rdg±5dgt
250V (10%) DC	0.01MΩ to 10.0GΩ	±3%rdg±5dgt
	10.0GΩ to 500GΩ	±15%rdg±5dgt
500V (10%) DC	0.01MΩ to 25.0GΩ	±3%rdg±5dgt
	25.0GΩ to 1.00TΩ	±15%rdg±5dgt
1000V (10%) DC	0.01MΩ to 50.0GΩ	±3%rdg±5dgt
	50.0GΩ to 2.00TΩ	±15%rdg±5dgt
2.5KV (10%) DC	0.01MΩ to 100GΩ	±3%rdg±5dgt
	100GΩ to 5.00TΩ	±15%rdg±5dgt
5KV (10%) DC	0.01MΩ to 200GΩ	±3%rdg±5dgt
	200GΩ to 10.0TΩ	±15%rdg±5dgt

CAPACITANCE AND CURRENT MEASUREMENT RANGE AND ACCURACY

	Range	Accuracy
Current Measurement Range	0.01nA to 20.00mA	1.5%±5dgt
Capacitance Range	0.010uF to 100.0μF	±20%±0.005μF
AC/DC Voltage	0V to 1000V	±2%rdg±5dgt



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500V (10%) DC	0.01MΩ to 25.0GΩ	±3%rdg±5dgt
	25.0GΩ to 1.00TΩ	±15%rdg±5dgt
1000V (10%) DC	0.01MΩ to 50.0GΩ	±3%rdg±5dgt
	50.0GΩ to 2.00TΩ	±15%rdg±5dgt
2.5KV (10%) DC	0.01MΩ to 100GΩ	±3%rdg±5dgt
	100GΩ to 5.00TΩ	±15%rdg±5dgt
5KV (10%) DC	0.01MΩ to 200GΩ	±3%rdg±5dgt
	200GΩ to 10.0TΩ	±15%rdg±5dgt
10KV (10%) DC	0.01MΩ to 400GΩ	±5%rdg±5dgt
	400GΩ to 20.0TΩ	±20%rdg±5dgt

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