

S420 5 kV Insulation Test Set



- Output voltage level: 5000V, 2500V, 1000V, 500V, 250V
- Short circuit current output: 10mA, 5mA, 3.5mA, 1.5mA
- Resistance measurement range: 0.01MΩ~5TΩ
- Voltage measurement range: AC 0.01V~750V, DC 0.01V~1000V
- Large LCD with backlight display
- Anti-interference
- 3 terminal test
- Accurate results

DESCRIPTION

S420 5 kV Insulation Test Set is a fully automatic 5kV insulation test set designed to provide a comprehensive assessment of the conditions of electrical insulations of high voltage apparatus such as the insulation resistance of transformers, bushing, circuit breakers, and other machinery. S420 makes measurement by using the ohm's law with the 3 terminal method, which is much more accurate than the 2 terminal method. An additional Guard Terminal provides a return circuit that bypasses the meter, providing users a more precise result. The instrument is also able to automatically calculate the absorption ratio (DAR) and polarization index (PI), giving users a comprehensive diagnostic of the insulation result.

APPLICATION

S420 provides a quick and easy way to determine the condition of the insulation on the wire, generators, transformers, etc. It is widely used in transport, power utility, factories, and general industries.

SPECIFICATIONS

Functions	Insulation resistance, polarization index, absorption ratio, AC/DC voltage test; Automatic discharge function; Ambient temperature test		
Power	DC 14.8V 2600mAh rechargeable Li-battery, full battery voltage 16.8V		
Output Voltage	Setting range: 250V、500V、1000V、2500V、5000V		
Short Circuit Current	≥5mA (optional: ≥10mA、≥3.5mA、≥1.5mA)		
Wire Connection Method	L port: High Voltage Terminal. The other end of the lead cable connected from the L port should be connected to the insulator that needs to be measured		
	G port: Guard Terminal. Provides a return circuit that bypasses the meter. For example, if you are measuring a circuit having a current that you do not want to include, you connect that part of the circuit to the "GUARD" terminal		
	E port: "E" Ground Terminal. Connect to the ground or neutral to the measured object. For example, the housing, transformer grounding, or cable shield		
	V port: AC / DC voltage measuring terminal (AC / DC automatic identification)		
Resolution	Insulation resistance: 0.01MΩ		
	AC voltage: 0.01V		
	DC voltage: 0.01V		
Test Duration	1~30 mins (depends on measuring method, can be set)		
Backlight Brightness	Adjustable backlight, suitable for dark environments		
Measurement Range	The measurement range will be automatically adjusted based on the voltage of the conductor		
LCD	4 bite LCD , white screen with backlight		
LCD Size			
LCD Display Area	122mm×66mm		
Test Indication	During testing, a LED light will flash and there will be a bar that indicates the progress		
Charging Indication	A red light indicates it is charging; a green light indicates it is fully charged		



Dimensions	Instrument size : LWH 270mm×220mm×85mm		
Standard Test Wire	1 red lead, 1 green lead, 1 black lead		
Battery Voltage	The instrument will display battery level. Please charge when necessary		
Communication Port	Stored data can be uploaded to PC through a USB cable		
Communication Line	1 USB cable. length 1.5m		
Working Current	Stand by: 25mA Max (backlight off); Backlight: 25mA Max (only backlight on); Measuring: 450mA Max (backlight off)		
	Instrument: approx. 2.2kg (including battery)		
Weight	Total: approx. 4.11 kg (including package)		
Tool Bag	Standard yellow-black tool bag		
Ideal Working Conditions	-10 C ~40 C ; below 80%RH		
Ideal Storage Conditions	-20 $\mathrm{C}\sim$ 60 C ; below 70%RH		
Withstand Voltage	Between the wire and the housing AC 10.0kV 50Hz withstand for 1min		
Insulation Resistance of Housing	Between the wire and the housing >500 M Ω		
Electromagnetic Properties	IEC61326 (EMC)		

ACCESSORIES & ORDER DATA					
Description	Order Code	Description	Order Code		
S420 5 kV Insulation Test Set, 1 pc	S420	Included accessories for S420			
		Tool bag, 1 pc			
		Hi-Volt test rod (3m), 1 pc			
		Hi-Volt alligator clip, 1 pc			
		Hi-Volt test hook, 1 pc			
		Test leads with clip(3m), 3 pcs (black, green, red each 1)			
		18650 battery, 4 pcs			
		16.8V charger, 1 pc			
		Data software (e-copy), 1 pc			
		USB cable, 1 pc			
		User's manual, Warranty card, Certificate of Conformity, 1 copy of each			