

INTRODUCTION

The 7272A portable DC Resistance Tester is also known as Transformer DC Resistance Tester, Resistance Rapid Tester or Grounding Conductivity Tester. It adopts microprocessor technology, uses a four-wire test, is safe, precise and reliable.

It is mainly used for measurement of transformer winding resistance, ground down lead conduction testing, measurement of wire resistance of cables, switches, sockets, relay contact resistance, windings, motors, shell and equipment, lightning protection zones, ground beams, structures, racks, steel, pipes, windows, fence, radiators, pipeline connections between objects and metal components' resistance testing. It is widely used in various fields like telecommunication, electric power, meteorology, machine rooms, oil fields, electric power distribution lines, tower transmission lines, gas station, factory grounding grid, lightning rod and so on.

The 7272A Portable DC Resistance Tester is composed of a host, monitoring software, test line and communication line. The host handheld portable design is convenient for field applications as it uses battery power and has a charging function, saving the usual on-site power supply search. There is a full-colour, large, clear LCD display, with easy-to-use touch screen operations and port overload protection function.

It comes with large capacity storage for 500 groups of data, offers resistance measurement range: 10.0 $\mu\Omega$ - 50.00 K Ω , with measuring accuracy of: $\pm 0.2\%$ FS ± 10 digits. The computer software has functions for reading, consulting, saving and reporting historical data.



TECHNICAL SPECIFICATIONS

Function : Is mainly used for measurement of transformer DC Resistance, Transformer Winding Resistance, Network Connectivity, Cable Conductor Resistance, Contact Resistance of Switches, Connectors, Relays, Winding, Motor, Transformer Winding Resistance And Metal Riveting Resistance, Metal Component Coupling Between Resistance Test, Low Resistance Testing, Contact Resistance Testing, Etc.

Resistance Range	: 10.0 $\mu\Omega$ -50.00K Ω
Resolution Ratio	: 0.1 $\mu\Omega$
Precision	: $\pm 0.2\%$ FS ± 10 dgt
Detection Method	: The four-wire test
Measuring Current	: 10A, 5A, 1A, 0.1A, 10mA, 1mA
Maximum short circuit Current	: 10A
Overload Protection	: Yes
Self Discharge	: Yes
Power	: DC12.6v 2500mAh large-capacity lithium battery
Charging Function	: Yes
Back Light	: Yes, suitable for dark places

- Display Mode** : LCD Full-colour display
- Overflow Shows** : The “OL” symbol is displayed when the overrange overflow occurs
- Touch Screen Operation**: Yes
- LCD Size** : Length and width : 108mm×65mm
- Size of Instrument** : Length, width and height : 240mm×188mm×85mm
- Test Line Length** : 5 meters, 1 red, 1 black
- USB Interface** : With USB interface
- Line of Communication** : 1 USB communication cable
- Data Storage** : 500 groups
- View Data** : Data access function
- Cell voltage** : The battery power is displayed in real time, indicating that the battery should be charged in time when the battery voltage is low
- Auto Power-Off** : Turns off automatically after no operations for about 15 minutes
- Power Dissipation** : Standby: approx. 116mA (20% brightness)
Measurement : 27W Max
- Weight** : Instrument : 1100g (including batteries)
Test line : 850g
- Operating Temperature and Humidity** : -10°C ~ 40°C, Below 70%rh
- Storage Temperature and Humidity** : -20°C ~ 60°C, Below 70%rh
- Insulation Resistance** : More than 10 mΩ (circuit between the shell and 500V)
- Withstand Voltage** : AC 3700V/ RMS (between circuit and housing)
- Electromagnetic Property** : IEC61010-4-3, wireless frequency electromagnetic field ≤1V/m
- Suitable for Safety** : IEC61010-1, CAT III 600V, Pollution level 2, JJG724-1991 <<VERIFICATION Regulation of DC Digital Ohmmeter>>, JJG166-1993 <<Verification Regulation of DC Resistor>>, <<VERIFICATION Regulation of DL/T967-2005 Circuit Resistance Tester and DC Resistance Rapid Tester>>

Range and Accuracy

Measuring Current	Range	Precision	Resolution Ratio
10A	10.0uΩ~1000.0uΩ	±0.2%FS±10dgt	0.1uΩ
	1.00mΩ~100.00mΩ	±0.2%FS±10dgt	0.01mΩ
5A	100.0mΩ~1000.0mΩ	±0.2%FS±10dgt	0.1mΩ
1A	1.000Ω~10.000Ω	±0.2%FS±10dgt	0.001Ω
0.1A	10.00Ω~100.00Ω	±0.2%FS±10dgt	0.01Ω
10mA	100.0Ω~1000.0Ω	±0.2%FS±10dgt	0.1Ω
1mA	1.000KΩ~10.000KΩ	±0.2%FS±10dgt	0.001KΩ
	10.00KΩ~50.00KΩ	±0.2%FS±20dgt	0.01KΩ

Note: The standard condition of error range in the above table is 25°C ± 5°C, and the maximum error in the working environment is 0.5%FS±10dgt.

