

FR3060 DC low resistance tester



I. Product Introduction

FR3060 DC low resistance tester also known as micro-ohmmeter, ohmmeter, DC grounding resistance tester, using the microprocessor technology, four-wire test, safety, precision and reliability. It is the instrument that detects the equipotential bonding quality of metal components such as metal riveting resistors of vehicles, ships and aircrafts, equipment housings, lightning protection belts, ground beams, structures, cabinets, steel bars, water pipes, windows, guardrails, radiators, and assembly lines. It is also possible to measure the resistance of the connecting conductor between the various electrical equipment and the grounding grid, the DC resistance of the transformer. It can also measure the contact resistance of switches and socket contacts, the low value resistance of coils, metal wires, solder joints, etc. Widely used in telecommunications, electricity, factories, meteorology, computer rooms, oil fields, power distribution lines, iron tower transmission lines, gas stations, factory grounding networks, lightning rods and so on. It also has the function of measuring DC voltage and AC voltage.

FR3060 digital equipotential tester consists of host computer, monitoring software, test line, communication line, etc. Large screen LCD display on the host, at a glance. Can store 500 sets of data, resistance measurement range: $0.01\text{m}\Omega \sim 30\text{K}\Omega$. The monitoring software has on-line real-time monitoring and historical query functions, dynamic display, alarm value setting and alarm indication function, and functions such as reading, reviewing, saving, reporting and printing of historical data.

II. Technical Specification

Function	Equipotential bonding resistance test between metal components, low-value resistance test, resistance test of connecting conductors between ground and ground electrodes, contact resistance test, etc.
DC resistance range	$0.01\text{m}\Omega \sim 30.00\text{K}\Omega$ Accuracy $\pm 0.5\%$ FS
Resistance resolution	$0.01\text{m}\Omega$

Test method	Four-wire test
Short circuit test current	$\geq 1\text{A}$
Open circuit voltage	$\leq 4.2\text{V}$
Power	DC 3.7V Large-capacity lithium battery, continuous standby for more than 100 hours
Backlight	Controllable gray screen backlight, suitable for use in dim places
Display mode	5-bit large LCD display, gray screen backlight
Measurement instructions	LCD Digital Display
LCD size	72×55mm
Instrument size	L/W/T: 187*119*48mm
Test line length	red 2m, black 2m each one (Four-wire clip)
Measurement time	Resistance test: about 2 times/sec;
USB interface	With USB interface, software monitoring, storage data can be uploaded to the computer, save the print
Communication Line	USB Communication Line 1PC
Data storage	500 groups, "MEM" storage instructions, display "FULL" symbol indicates that the storage is full
Data review	Data review function: "MR" symbol display
Overflow display	Over-range overflow function: "OL" symbol display
Alarm function	Alarm when the measured value exceeds the alarm setting value
Battery voltage	Real-time display of battery power, reminding timely charging when battery voltage is low
Automatic shut-down	"APO" indicates, automatic shutdown after 15 minutes
Power consumption	Standby: 30mA Max(backlight off)
	Turn on the backlight: 43mA Max
	Measure: 2A Max(backlight off)
Weight	Instrument: 850g(including battery)
	Test line: 250g
Working temperature and humidity	-10°C~40°C; below 80%rh
Storage temperature and humidity	-20°C~60°C; below 70%rh
Overload protection	AC 50V/3 seconds between C1-C2 P1-P2 ports
Insulation resistance	More than 10MΩ(Between circuit and case 500V)
Pressure resistance	AC 3700V/rms(Between circuit and case)
Electromagnetic properties	IEC61010-4-3, Wireless frequency electromagnetic field $\leq 1\text{V/m}$

Suitable for Safety Regulations	IEC61010-1, CAT III 600V, Pollution Level 2, JJG724-1991 "Determination of Direct Current Digital Ohmmeter", JJG166-1993 "Dialect Resistor Verification Regulation", "DL/T967-2005 Loop Resistance Tester and DC Resistance Fast Tester Verification Procedures
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III. Accessories

Instrument	1PC
Instrument box	1PC
Monitoring Software CD	1PC
USB Communication line	1PC
Test line	Kelvin test line 2 (red 2m, black 2m)
Charger	1PC
Manual, certificate	1SET



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