

ES3090 Loop Resistance Tester



1. Introduction

Loop resistance tester, also known as **microohmmeter** and **contact resistance tester**, is a product carefully developed by our company to measure various high-voltage switch contact resistance, high-voltage circuit breaker contact resistance, metal welding component connection resistance, metal conductor loop resistance, Instrument for precision microohm resistors.

二、 Technical indicators

model	ES3090	ES3090E
Maximum test current	100A	220A
Remark		Currents above 100A only support fast mode
Function	Various contact resistance tests such as high-voltage switches and high-voltage circuit breakers; connection resistance tests of metal welded components; various loop resistance tests such as metal conductors; precision micro-ohm resistance tests	
power supply	Built-in: 11.1 V 4000mAh rechargeable lithium battery	
test method	four-wire method	
charger	14.8 V charger	
display mode	5.6-inch industrial-grade high-brightness color LCD screen	
test interface	I+ (positive current), I- (negative current), U+ (positive voltage), U- (negative voltage)	
Current output	Coarse adjustment gear: $\leq 5A$, 10A, 30A, 50A, 80A, 100A, 200A, 220A	
	Thin strip gear: step value 2.5A, up to 87 gears of current	
Measuring range	$\leq 5A$: $100\mu\Omega \sim 3500m\Omega$	
	10A: $20.0\mu\Omega \sim 200m\Omega$	
	30A : $10.0\mu\Omega \sim 20.0m\Omega$	
	50A : $2.00\mu\Omega \sim 15.0m\Omega$	
	80A : $1.00\mu\Omega \sim 10.00m\Omega$	
	100A : $0.10\mu\Omega \sim 5.00m\Omega$	

	200A: 0.10μΩ~600uΩ
	220A: 0.10μΩ~500uΩ
Minimum resolution	0.01μΩ
Test accuracy	±(reading×0.15% +0.5μΩ)
testing time	≤100A: Fast (recommended), 10s, 20s, 30s, 40s, 50s, 60s >100A: Fast Mode
data storage	999 sets of data can be stored
Instrument size	Approx. 229 mm (length) × 166 mm (width) × 74 mm (height)
quality	Instrument weight: about 2kg
Test line	Standard length: 3m
	The current and voltage test lines are tapped at both ends. The wiring is simple and the resistance is less than 10mΩ.
Data deletion	Select the format memory option in the settings interface to delete all data
Data review	Enter the data review interface and press the up, down, left and right keys to browse the stored data.
Automatic shut-down	have
battery voltage	There is a battery power indicator on the instrument corner.
backlight	Backlight adjustable brightness
Working current	The operating current under non-test conditions is 200 mA
	The working current can be set by yourself in the test state.
circuit protection	With open circuit protection, overheating protection, etc.
temperature protection	The instrument is equipped with temperature monitoring
Working temperature and humidity	-10°C~40°C; below 70%RH, no condensation
Storage temperature and humidity	-20°C~60°C; below 70%RH
Suitable for safety regulations	IEC61010-1, CAT III 600V, pollution level 2, JJG166-1993 "Verification Procedures for DC Resistors", "DL/T967-2005 Loop Resistance Tester and DC Resistance Rapid Tester Calibration Regulations》

◆Note: This introduction is for reference only, please read the manual for detailed parameters.

3. Packing list

Cloth bag	1pcs
Tester	1 pcs
Test line	1 set (one set each of red and black 3 meters)
Charger	1pcs
Instructions, warranty card	1 set

Guangzhou Zhengneng Electronic Technology Co., Ltd.

Address: 4th Floor, No. 771, Guangcong 8th Road, Changyaoling Village, Zhongluotan Town, Baiyun District, Guangzhou City

Tel: 020-37319325, 020-36544171, 020-36544172

Fax: 020-37319075

Postal code: 510540

Company website: www.znele.com