

# Resistance Tester

## Loop / Contact Resistance Tester

### TR-3990 Series



TR-3990E

#### Product description:

TR-3990 series it is contact resistance tester, also known as micro-ohmmeter and Loop resistance tester is a product carefully developed by Tessio Technology Ltd. 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.

#### Features

- Four-wire test method.
- Measuring Resistance range 0.01μΩ ~ 3500mΩ.
- Test accuracy : Reading x 0.15% + 0.5μΩ.
- Current output : coarse adjustment gear : ≤5A, 10A, 30A, 50A, 80A, 100A, 200A, 220A. Thin strip gear : step value 2.5A up to 87A gears of current.
- Meet safety regulations are EC61010-1, CAT III 600V, pollution level 2, JG166-1993 "Verification Procedures for DC Resistors", "DL/T967-2005 Loop Resistance Tester and DC Resistance Rapid Tester Calibration Regulations.

#### Ordering Informations

- TR-3990** : 100A Handheld Contact/Loop Resistance Tester
- TR-3990E** : 220A Handheld Contact/Loop Resistance Tester

#### Standard Accessories :

- User Manual
- Test line set (3M Black& Red)
- Cloth bag
- AC Charger
- USB Cable



#### Specifications

Model	TR-3990	TR-3990E
Maximum test Current	100A	220A
Remark		Current 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.	
Test Method	Four-wire method	
Display Mode	5.6-inch industrial-grade high-brightness color LCR screen	
Test Interface	I+ (positive current), I- (negative current), U+ (positive voltage), U- (negative voltage)	
Current Output	Coarse adjustment gear: ≤5A, 10A, 30A, 50A, 80A, 100A, 200A, 220A Thin strip gear: step value 2.5A, up to 87 gears of current	
Measuring Range	≤5A: 100μΩ ~ 3500mΩ 80A : 1.00μΩ ~ 10.00mΩ	10A: 20.0μΩ ~ 200mΩ 30A : 10.0μΩ ~ 20.0mΩ 50A : 2.00μΩ ~ 15.0mΩ 100A : 0.10μΩ ~ 5.00mΩ 200A : 0.10μΩ ~ 600μΩ 220A : 0.10μΩ ~ 500μΩ
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	
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.	
Test Line	The current and voltage test lines are tapped at both ends. The wiring is simple and the resistance is less than 10mΩ.	
Automatic Shut-down	√	
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	
Power Supply	Built-in: 11.1 V 4000mAh rechargeable lithium battery	
Charger	14.8 V charger	
Working Environment	-10°C ~ 40°C; below 70%RH, no condensation	
Storage Environment	-20°C ~ 60°C; below 70%RH	
Dimensions (LxWxH)	Approx. 229 × 166 × 74 mm.	
Weight	Around 2kg	
Suitable for safety regulations	IEC61010-1, CAT III 600V, pollution level 2, JG166-1993 "Verification Procedures for DC Resistors", "DL/T967-2005 Loop Resistance Tester and DC Resistance Rapid Tester Calibration Regulations》	