

# Resistance Tester

## F. TH2523 Battery Tester



NEW

### TH2523

#### Features

- Multiple test functions
  - 4-terminal test, the test can't be influenced by impedance of test leads.
  - Contact inspection, to inspect the contact of test leads in testing
  - Deviation deduction (rel) and reference operation, eliminate the influence of base to test result.
- Feature of battery tester
  - Basic impedance accuracy: 0.1%
  - Basic voltage accuracy: 0.1%
  - Min. resolution of impedance: 1 $\mu\Omega$
  - Min. resolution of voltage: 100 $\mu\text{V}$
  - Max. test speed 50 times/s
  - 1kHz AC constant current source test
- R, V, L, Z,  $\theta$  test
- 24 bit color 4.3 inch LCD display
- LCD resolution 480 $\times$ 272
- Direct and  $\Delta\%$  display
- V, I test signal level monitor function
- Graphic scanning and analysis
- 10 bin compare, High limit, low limit, pass and alarm function
- Statistics, like CpK, Cp.etc
- 100 groups of file for storage and load
- Information in screen stored in U disk.
- Automatic update through USB HOST
- Chinese-English operation system selectable
- Foot switch trigger function
- Handler interface
- RS232、USB HOST、USB Device、GPIB (optional), for communication with PC and remote control

#### Brief Introduction

■ As the growth of electronic products, cell phone, home appliances, electric vehicle and bike emerge in an endless stream, all need to work with battery, so the fast inspection on batter will influence the performance of products.

With Tonghui's experience in impedance test and marketing survey, the new battery tester-TH2523 is successfully launched. It can be competitive with other similar products with its outstanding performance, easy operation and new look.

- 1kHz constant current source is adopted to eliminate the potential error of thermoelectric force to DUT.
- Max.300V(TH2523A) test voltage can meet the demand of high voltage battery
- 0.1% basic resistance accuracy, the range of 30m $\Omega$ -3000 $\Omega$  can cover the test demand of large battery pack to button battery, and as well for large type but low resistance lithium battery
- The fast test speed can up to 20ms/time
- Meet the demand of ACR test for general components.
- TH2523 provides multiple interfaces, which is for PC communication and remote control.

#### Specifications

Model	TH2523	TH2523A
Display	Displayer	4.3 inch 480x272 24 bit color TFT display
	Displayed digit	R: slow 5 digits, Max. displayed digit 35000; fast, Max. displayed digit 3500 V: slow 5 digit, Max. displayed digit 35000; fast, Max. displayed digit 3500
Parameter	R,V,R-V,Z- $\theta^{\circ}$ , Z- $\theta_r$ , L-Q,L-R,R-X,R-Q	
Basic accuracy	R:0.1%, V:0.05%	
Test signal source	Frequency	1kHz $\pm$ 0.2Hz sine waveform
	Constance current	100mA/10mA/1mA/100 $\mu$ A/10 $\mu$ A
Display range	R/ Z/ X	1 $\mu\Omega$ —3.5k $\Omega$
	DC V	100 $\mu$ V—65V   100 $\mu$ V—350V
	L	0.2nH-1H
	Q	0.001—9999.9
	$\theta$ d(deg)	-179.99—179.99
$\theta$ d(rad)	-3.1416—3.1416	
Mathematics	Direct, $\Delta$ ABS, $\Delta\%$	
Range	AC R	30m $\Omega$ /300m $\Omega$ /3 $\Omega$ /30 $\Omega$ /300 $\Omega$ /3k $\Omega$
	DC V	6V/60V   30V/300V
Max. input voltage	65V	350V
Test speed(time/s)	FAST: 50 times/s MED: 10 times/s SLOW1: 5 times/s SLOW2: 3 times/s	
Comparator	10 bins	
Range mode	Auto, hold	
Trigger mode	Internal, manual, external, bus	
Operation mode	Test leads contact inspection; DUT I/V monitor; REL; short "0"; 1-255 average; delay setting; graphic analysis and scanning; USB storage; Max.100 groups of file save/load; Statistics of Max.30000 of data	
Interface	Handler、RS232、USB DEVICE、GPIB (optional)、USB HOST	
General specification		
Operating environment	Temperature	0 $^{\circ}$ C -40 $^{\circ}$ C
	Humidity	$\leq$ 90%RH
Power supply	Voltage	100V-120V, 198V-242V
	Frequency	47Hz - 63Hz
Power consumption	Max.15AV	
Dimensions(WxHxD)	215mmx87mmx335mm(net) 235mmx105mmx360mm(with sheath)	
Weight	About 3.6k	

#### Application

- Fast test for button battery and battery pack .etc.
- For cell phone, home appliances, electric vehicle and bike .etc.
- For high voltage battery test
- For early battery R&D test
- Contact resistance test
- Degradation and lifetime - evaluation of battery
- UPS on-line test
- ESR test of super capacitor