



### Product Function

Used for testing the lightning protection elements performance parameters of the metal oxide varistors (MOV) and gas discharge tube (GDT) and the measurement of insulation resistance (Mohm), polarization index (PI), dielectric absorption ratio (DAR).

### Product features

1. The new generation of intelligent lightning protection component tester, equip with touch colorful screen, click "HELP" key on the screen to pop up the operation guide, effectively guiding the user to operate the tester.
2. The tester has stable output voltage up to 3000V, can meet the testing request of various components.
3. The tester has professional parameters setting function: step up speed setting, high voltage limit setting, qualified range setting, and qualified judgment condition setting, make the testing convenient and easy.
4. With the choice of single test mode and continuous test mode, continuous test mode is especially suitable for batch component testing.
5. Automatic storage of test results containing date and time, can store 3000 groups of test records, data upload function by USB interface. Adopt with large capacity rechargeable lithium battery.

### Technical Specification

#### 1. Range and Measurement Accuracy

Measurement Function	Output Voltage	Measurement Range	Accuracy	Resolution	Test Condition
MOV	Initial action voltage U (1mA)	50~3000V	$\pm 2\%rdg \pm 3dgt$	1V	1mA $\pm 5\mu A$
	Leakage Current I(0.75U, 1mA)	0~1000 $\mu A$	$\pm 2\%rdg \pm 10dgt$	0.1 $\mu A$	0.75U1mA $\leq \pm 1\% \pm 1d$
GDT	DC breakdown voltage V <sub>sd</sub>	50~3000V	$\pm 2\%rdg \pm 3dgt$	1V	100V/S $\pm 10\%$
*Insulation resistance	500V	0.5M $\Omega$ ~2G $\Omega$	$\pm 5\%rdg \pm 10dgt$	0.1M	Only for ETCR3800B
	2500V	2.5M $\Omega$ ~10G $\Omega$	$\pm 5\%rdg \pm 10dgt$	0.1M	

#### 2. Others Technical Parameters

Power Supply	DC 7.2V 2600mAH rechargeable lithium battery
Display Mode	Touch colorful screen, LCD size: 108mmX65mm
Host Dimension	215mmX178mmX83mm
Weight	Total weight: 2.09kg(include accessories)
Test Line	Red line 1.5m, black line 1.5m
Step Up Voltage Speed Setting	Total 5 step up levels
High Voltage Threshold Value Setting	Adjusting with step "250V", the maximum can be set up to 3000V
Qualified Range Setting	Yes
Qualified Judgement Condition Setting	Can set the voltage or leakage current as the qualified judgement condition
Qualified Judgement Prompt	Buzzer prompt, qualified will sound once, unqualified will sound triple
Test Mode	Single test: Test directly and no need preset; Continue test: Preset the voltage to continue testing, fast and effective
Insulation Resistance Test Function	Insulation resistance (Mohm), polarization index (PI), dielectric absorption ratio (DAR) (only for ETCR3800B)
Data Storage	Test result with date and time, MOV 1000 groups; GDT 1000 groups; Insulation resistance: 1000 groups
Data Upload	USB interface, storage test record can be uploaded to computer
Battery Voltage	Battery power indication, when battery voltage low remind to charge in time
Automatic Shutdown	Automatic shutdown after starting up 15 minutes without any operation
Accessories	Host: 1PCS; Test line: 2PCS; Alligator clip: 2PCS; Probe: 2PCS; Charger: 1PCS; USB data cable: 1PCS; Tool bag: 1PCS